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DEPARTMENT OF STATE, Office of the Secretary, June 21, 1889.

Hon. Cyrus G. Luce, Governor of Michigan:

SIR—In compliance with the requirements of the laws of this State, I have the honor to submit herewith the Twenty-second Annual Report relating to Births, Marriages and Deaths, returned for the year ending December 31, 1888.

The subjects presented for consideration in the present volume are as usual those concerning the natural increase of our population, the number of marriages and the mortality. An effort has been made to collect and classify, in the most perfect manner possible all the evidence relating to these subjects.

An examination of Exhibit A, on page 2, shows that 17,233 marriages, 48,952 births, and 21,764 deaths were returned for the year 1888. The same Exhibit also shows an excess of 27,188 births over deaths during the year. This number represents, according to the returns, the natural increase in population for the year.

In order to study the influence upon the health of the inhabitants exerted by climate, water, drainage, etc., the State is divided into divisions, the characteristics of which are more or less distinct. Each of these divisions is made up of a number of counties, the list of which, arranged in alphabetical order, will be found in Table 75.

In this as in preceding reports, much attention has been given to the causes of deaths, this being considered the most important part of the work. Beginning on page 143, the causes specified for the deaths in Michigan in 1888 are studied by classes, by months in the year, by part of the body affected, and the localities in which the death occurred. It is gratifying in this connection to note the fact that the reports of the causes of death are more accurate and satisfactory than in previous years.

The most important causes of mortality, in 1888, were consumption, pneumonia, diphtheria, heart disease, and cholera infantum. There was no destructive epidemic during the year, and while the number of deaths were increased, as compared with those of 1887, it was no more than would naturally result from the increase in the population. Zymotic diseases, on the prevalence of which the health of a season usually depends, have fallen

off over two per cent from the preceding year. Consumption is always a leading cause of mortality and usually has more victims than any other two diseases. Pneumonia is also a prominent cause of death, but the miasmatic diseases vary more or less from year to year according as one or the other is epidemic.

There was an unusual mortality among children and infants, in 1888, as may be seen by examining the figures in Table 49. Always very great, it is greater this year than for any year since 1884. Over 38 per cent of all deaths occurred among children under five years of age. This is accounted for by the increased number of deaths from cholera infantum and measles.

The importance of thoroughness and accuracy in our system of registration, as has been alluded to in previous reports, can hardly be overestimated. Unless the work, including the original returns of the supervisors as well as the tables and abstracts compiled at this office, be well done, it will be of little value. In order to secure this result, much care and labor are bestowed upon the returns. Whenever any error is discovered in the returns it is carefully noted and correction secured, if possible, by correspondence with the officials.

Respectfully submitted,
GILBERT R. OSMUN.
Secretary of State.

BIRTHS, MARRIAGES AND DEATHS

IN MICHIGAN

DURING THE YEAR 1888.

This report upon the subject of births, marriages and deaths, like its predecessors, is based upon the official returns received in the Department of State from the county clerks.

In this State the enumeration of births and deaths is made and reported to the county clerks by the supervisors and assessors of townships and cities, except in Detroit, where the enumeration is made by persons appointed by the common council. The facts concerning marriages are reported to the county clerks by the ministers of the gospel and justices of the peace, who are authorized to solemnize marriages in Michigan.

The important facts considered in these pages are the rates of births, marriages, and deaths to the population, the age, sex, nativity, seasons of the year, etc., relating to each of the above divisions. Special prominence is given to the diseases or causes of death which will be found in the latter part of the work.

Exhibit A, which gives a comprehensive statement of registration for the years 1885, 1886, 1887, 1888, and the average for ten years, 1878–1887, shows that there were returned for the year 1888, 48,952 births, 17,233 marriages, and 21,764 deaths, making an aggregate registration of 87,949, or 5,191 more than were recorded for the year 1887, and 12,036 more than for the year 1886. As compared with the year 1887, there were reported 2,726 more births, 61 more marriages, and 2,282 more deaths. The natural increase of population, or excess of births over deaths, is 27,188, a number more by 444 than the natural increase in 1887. It is the largest excess recorded in any one year in Michigan. As compared with the average for the ten years 1878–1887, the year 1888 shows a very large increase in each division.

EXHIBIT A.—Births, Marriages and Deaths returned as having occurred in Michigan during each of the Years 1885 to 1888, and the Average for Ten Years, 1878–1887, as returned and as corrected for omissions in the enumeration.

		1885.	1886.	1887.	1888.	Average 10 Years, 1878–1887.
_	Marriages a	15,885	16,658	17,172	17,283	15,775
T Dec	Births	42,119	41,095	46,226	48,952	38,704
As returned,	Deaths	16,646	18,187	19,482	21,764	16,822
-	Excess of births over deaths	25,473	22,908	28,74 4	27,188	21,882
, É g	(Births	58,026	60,484	58,493	60,120	54,091
As corrected for omissions.	Deaths	22,704	25,210	27,251	26,043	24,484
A 55 E	Excess of births over deaths	35,322	35,274	31,242	34,077	29,657

a Corrected for additional returns up to April 13, 1889.

POPULATION.

As there has been no census of the State taken since the year 1884, it is desirable to make an estimate of the population for the years since that time.

In order to secure the most accurate results, the method usually adopted by statisticians has been employed, which is based upon the supposition that the annual rate of increase prevailing from 1880 to 1884 was also maintained for the year 1888.

This estimate, of course, is only approximately correct, as there may be a great difference in the rate of immigration and emigration from one year to another.

Based upon this annual rate of increase, the population for the State for the years 1880–1888, that for the years 1880 and 1884 being the actual figures as per census, would be as follows:

Years.	Population.
1880	1,636,937
1881	1,688,599
1882	1,741,891
1883	
1884	
1885	1,912,159
1886	
1887	
1888	2,098,976

The relations which the births, marriages and deaths sustain to each other, as well as to the inhabitants of the State, may be seen in Exhibit B. The natural daily increase of population in 1888 was 74, one more than in the previous year. By the returns and the population of 1884, one child was born, in 1888, to every 38 persons, one marriage was solemnized to every 107 persons, and one death occurred to every 85 persons.

The birth-rate, marriage-rate, and death-rate according to the population of 1884, represented by the returns in 1888, were as follows:

Birth-rate	26.50 to 1,000
Marriage-rate	9.30 to 1,000
Persons married	18.60 to 1,000
Death-rate	11.79 to 1,000

EXHIBIT B.—Statements concerning Births, Marriages and Deaths in Michigan during the Years 1884–1888 inclusive.

	a 1884.	a 1885.	1886.	1887 .	a 1888.
Inhabitants represented by returns of marriages to one marriage b.	115.93	116.69	111.28	107.95	107.49
In population represented by marriages, males to one marriage.	60.94	61.34	58.50	56.74	56.51
In population represented by marriages, females to one marriage.	54.98	55.34	52.77	51.19	50.98
Inhabitants represented by births to each child returned.	45.78	43.95	44.98	39.94	37.74
Inhabitants, males to each male child returned	46.49	44.86	45.54	40.37	38.02
Inhabitants, females to each female child returned	45.20	43.11	44.51	39.58	37.45
Inhabitants represented by deaths to one death	102.40	110.90	101.61	94.79	84.81
Inhabitants, males to one death of male	101.32	107.50	99.87	91.86	82.78
Inhabitants, females to one death of female	104.61	115.68	104.34	98.70	87.37
Deaths, males to 100 females	114.36	119.24	115.75	119.00	117.00
Births, males to 100 females	107.70	106.50	108.28	109.00	109.00
Total population of State, males to 100 females	110.85	110.85	110.85	110.85	111.00
Births to one death	2.24	2.53	2.26	2.37	2.25
Births, males to one death of male.	2.18	2.40	2.19	2.27	2.18
Births, females to one death of female. Children born of which the sex was unknown or not	2.82	2.69	2.34	2.49	2.88
stated	86.00	63.00	63.00	70.00	25.00
Decedents of which the sex was unknown or not stated.	82.00	52.00	60.00	42.00	18.00
Natural daily increase of population, as per hirths and deaths returned	61.00	69.00	63.00	73.00	74.00
Natural daily increase of population where returns of births and deaths are corrected for omissions in the enumeration	82,00	97.00	97.00	86.00	94,00

In computing statements for this column the population of 1884 was used.
 Marriages corrected for additional returns up to April 13, 1889.

The following statistics, taken from the registration report of Massachusetts for 1888, show the rates of births, marriages and deaths in various states and countries.

Rates of Births, Marriages and Deaths in various States and Countries for the Years 1886 and 1887.

		188	86.			18	87.	
States and Countries.	Birth- rate.	Death- rate.	Excess of Birth-rate over Death- rate,	Marriage- rate.	Birth- rate,	Death- rate,	Excess of Birth-rate over Death- rate,	Marriage- rate.
Massachusetts	25.7	18.8	6.8	18.2	26.4 a 26.8	20.8 20.6	6.2 6.3	19.4 19.8
New Hampshire	19.2	18.5	0.7	19.1	19.9	18.7	1.2	20.1
Rhode Island	24.5	18.8	5.7	17.7	24.2	19.9	4.3	18.0
England and Wales	32.4	19.3	13.1	14.1	31.4	18.8	12.6	14.2
Scotland	32.4	18.6	13.8	12.4	31.2	18.7	12.5	12.5
Ireland	23.3	17.9	5.4	8.4	23.2	18.3	4.9	8.7
Denmark	32.6	18.2	14.4	14.2	32.0	18.3	13.7	14.0
Sweden	29.8	16.6	13.2	12.8				
Austria	37.7	29.2	8.5	15.5	38.2	28.9	9.3	15.6
Prussia	87.7	28.0	11.7	16.2	37.8	23.9	13.9	16,0
Netherlands	34.6	21.8	12.8	18.9	33.7	19.7	14.0	14.0
France	23.9	22.5	1.4	14.8	23.5	22.0	1.5	14.6
Hungary	45.5	32.2	13.3	19.3				
Switzerland	27.5	20.4	7.1	13.7		- -		
Belgium	29.6	21.1	8.7	18.4	29.4	19.3	10.1	14.2
Italy	36.5	28.3	8.2	15.6	38.3	27.7	10.6	15.5
German Empire	37.1	26.2	10.9	15.8	36.9	24.2	12.7	15.6
Norway	30.9	16.1	14.8	18.1				

a 1888.

As seen from Exhibit C, there were returned to the State Department during the period of twenty-one years, from 1868 to 1888 inclusive, 728,250 births, 265,676 marriages, and 303,558 deaths, making a grand total of 1,297,484. The average for these years will be found on the lower line of the exhibit. There has been a noticeable increase in the number of marriages returned for the years 1887 and 1888. The returns for 1868 embrace only a fractional part of the year, namely, from April 5 to December 31.

EXHIBIT C.—The Number of Births, Marriages, Deaths and Excess of Births over Deaths, as returned for each of the Years 1868–1888.

Years.	Births.	Marriages.	Deaths,	Excess of Births over Deaths,
1868	19,171	5,485	6,326	12,845
1869	27,093	8,459	9,145	17,948
1870	26,663	9,160	10,766	15,897
1871	25,992	10,181	9,728	16,284
1872	27,993	9,882	13,371	14,622
1878	34,608	10,574	14,258	20,350
1874	31,151	11,041	12,500	18,651
1875	31,958	11,055	11,990	19,968
1876	84,285	10,858	12,576	21,659
1877	33,395	11,009	12,919	20,476
1878	85,162	12,221	12,766	22,896
1879	34,122	13,225	14,407	19,715
1860	35,823	14,149	16,102	19,221
1881	34,749	14,847	19,238	15,511
1882	37,026	16,178	16,425	20,601
1883	40,809	16,420	16,906	23,908
1884	40,408	15,002	18,056	22,852
1885	42,119	15,016	16,646	25,478
1886	41,095	16,631	18,187	22,998
1887	46,226	17,050	19,482	26,744
1888	48,952	17,233	21,764	27,188
Total	728,250	265,676	303,558	424,692
Average	34,679	12,651	14,455	20,224

The average number of births, marriages and deaths for certain specified periods of time within the year 1839 will be found in Exhibit D. There were on an average. according to the returns, 134 births, 47 marriages, and 60 deaths during each day of the year 1888. The daily increase of population, as shown by the excess of births over deaths, was 74 per day. When the returns of births and deaths are corrected for omissions, as in the lower part of the exhibit, the numbers are considerably increased.

EXHIBIT D.—The number of Marriages, Births, Deaths, and Excess of Births over Deaths in Michigan during the Year 1888, the Average Number and Excess for specified periods of time within the year as returned, and the same for Births and Deaths as corrected for omissions in the enumeration.

	Periods of Time—1888.	Marriages, 1888.	Births, 1888.	Deaths, 1888.	Excess of Births over Deaths,
	Year 1888 a	17,288	48,952	21,764	27,188
1	Quarter	4,308	12,238	5,441	6,797
etan.	Month	1,436	4,079	1,814	2,265
As Returned.	Week	381	941	419	522
•	Day	47	134	60	74
Ħ	Year 1888 b		60,120	26,043	84,077
Deat.	Quarter		15,030	6,511	8,519
s and Deaths Corrected.	Month		5,010	2,170	2,840
Births a	Week		1,156		55
뵯 "	Day		165	71	94

The design of Exhibit E is to show the natural increase of population, or excess of births over deaths, by months, for the years 1883-1888, and in the last line the monthly averages of excess for the 10 years, 1879-1888. It will be observed that the average excess for the ten years is less by 4,831 than the excess for the year 1888. An examination of the exhibit will show that the largest excess of births for the year 1888 was in the month of June, while the average for ten years the largest excess of births was in the month of May.

a Unknown month included.
b Corrected as if enumerated in months of occurrence.

EXHIBIT E.—By Months, the Births, Deaths and Excess of Births over Deaths, according to the returns, in Michigan, during each of the Community of the Vears 1883–1888, inclusive.

2,315 2,012 1,967 1,615 1,929 2,125 1,886 4,058 1,748 4,198 1,910 8,544 3,689 1,564 8,727 1,841 2,181 Š 1,615 2,211 1,780 2,001 No. 2,288 3,540 8,445 1,492 2,132 1,779 3,94 2,245 1,848 2,457 3,624 1,761 1,904 ğ 1,618 2,081 3,559 1,877 1,682 8,88 1,559 3,436 3,707 88, 1,818 1,916 2,415 1,415 1,978 1,902 1,331 2,487 Sept. 1,651 2,114 1,917 1,756 8,924 1,58 85,488 8,781 1,887 1,894 2,055 2,211 2,169 3,345 1,906 Aug. 1,962 8,482 1,520 8,588 1,489 1,915 1,789 2,187 3,567 1,363 2,204 1,461 2,187 1,01 4,223 2,484 1,943 JE. Months. 1,286 3,852 1,958 2,079 June. 8,407 2,141 1,185 2,161 28, 2,071 1,405 4,188 1,627 2,506 2,281 1,456 8,730 1,286 2,444 8,488 2,122 3,960 1,472 2,488 1,858 2,356 2,013 1,430 8,480 4,214 2,287 2,054 May. 1,382 2,048 8,618 8,640 1,898 8,455 1,500 1,955 8,430 1,474 1,398 2,244 2,297 8,958 1,909 2,04 April. 1,988 1,865 1,930 2,112 2,452 2,23 8,498 1,421 8,456 1,994 585, 2,077 1,421 Mar. 2,858 1,184 1,600 878, 1,720 1,585 1,616 1,181 1,697 2,987 1,267 986, 1,765 3,150 1,876 8,516 1,274 1,931 Jeb. 1,588 1,661 2,617 1,085 1,552 1,249 1,883 1,416 1,066 1,578 1,623 1,087 2,707 1,181 3,132 2,654 8,531 Za G Total, 22,378 16,857 11,044 18,127 22,917 Deaths Excess of Births.... Births Deaths Excess of Births.... Deaths Excess of Births Deaths Deaths Monthly averages of excess for 1879 to 1888, inclusive.... Excess of Births. Births. Births Excess of Births. Excess of Births. Deaths Births.... Births. 1881 88 88 88 **8**€ 88 1887

Unknown month excluded.

EXHIBIT F.—Showing, by Sex, the Population in 1884, the Number of Marriages, Births and Deaths, and the Excess of Births over Deaths, in Michigan, during the Year 1888.

	Ă	Population, 1884.	n, 1884.				Births, 1888.	1888.			Deaths, 1888.	, 1888.		Елсева	Excess of Births over Deaths.	8 over D	seths.
State and Counties.			Ser.		Marriages, 1888.			Sex.				Sex.		1		Sex.	
	Total.	Males.	Fe- males.	Un- known.		Total.	Males.	Fe- males.	Un- Imown,	Total.	Males.	Fe- males.	Un- known.	Total.	Males.	Fe- males.	Un- known.
State	1,858,658	974,424	820,878	808	17,238	48,952	25,526	23,401	ន	21,764	11,722	10,024	22	27,188	13,804	18,877	7
Alcona	4,028	2,428	1,600		8	8	250	8		88	17	п		ಪ	8	71	
Alger					•	83	2	81		23	20	2	i	œ	10	••	
Allegan	38,666	20,062	18,614		818	792	88	878		23	220	802	-	75	98	175	
Alpena	12,688	9,990	5,698	:	187	90	83	38		117	2	17		282	156	283	
Antrim	8,761	4,736	4,025		78	808	115	86		92	88	8		128	2	28	
Arenac	4,027	2,319	1,708		22	121	8	\$		38	31	11		26	22	#	
Baraga	8,089	1,819	1,230		88	7.	**	88		2	88	\$		38	30	8	
Barry	24,102	12,507	11,595	-	98	200	192	170		171	82	*8		18	91	*8	
Bay	51,221	28,215	23,006		177	1,491	288	302		187	88	218		1,010	212	38	
Benzie	4,389	2,849	2,040		ង	102	8	28		22	25	17		28	22	92	
Berrien	87,776	19,225	18,551		876	610	22	88		388	198	100		275	921	119	
Branch	27,661	14,042	13,619	:	242	151	176	175		28	83	121		8	3	#	
Calhoun	41,585	21,297	20,285	æ	83	139	78	817		762	28	18		2807	35	23	
Саяв	21,202	10,886	10,316	:	172	88	180	148		172	88	88		106	88	28	:
Charlevoix	9,275	2,080	4,245	:	88	148	72	E		3	8	88		88	23	3	
Cheboygan	9,946	5,508	4,443		88	817	129	821		891	9	\$		214	8	25	
Спіррежа	8,422	4,746	8,676	:	108	178	뫓	88		8	88	29		115	8	28	
Clare	5,549	8,251	2,298		2	158	8	8		20	88	\$	_	72	8	28	

Clinton	27,135	14,064	18,101	-	22	827	22	288		283	116	121		123		117	
Crawford	2,380	1,381	1,008		8	91	3	-		7	7	•		0		→	
Delta	8,992	5,876	4,116	-	149	878	008	178		52	101	\$:	218		711	
Baton	31,802	16,210	15,592		992	468	225	242	-	868	997	136		172	2	106	-
2 Emmet	7,944	4,096	8,849		72	121	Z	20		8	28	97		ន		Ħ	
Genesee	38,776	19,782	18,994		328	25	28	272	-	220	83	148	-	271		132	
Gladwin	1,589	6 6	9		× 18	88	8	ន		71	4	2		88		81	
Gogebic					121	251	146	105		88	101	19		88		#	
Grand Traverse	12,092	6,522	5,570		120	247	134	113		181	2	19		911		23	•
Gratiot	25,049	18,204	11,845	:	883	478	972	23	63	88	\$ 8	22		8		130	61
Hilledale	31,696	116,911	15,773		888	888	169	169	:	259	138	23		20		\$:
Houghton.	26,146	14,168	11,978		158	1,022	35	8		35	180	158		679		315	
Haron	24,521	12,934	11,585	89	160	671	345	8		202	16	#		\$		215	
Ingham	84,989	17,917	17,022		884	167	245	978		8	212	81	-	8 8		28	
Ionia.	32,559	17,057	15,502		278	9#	컮	219		983	108	118		214		101	
Ioeco.	10,602	6,000	4,542		123	900	121	149		171	88	22		159		86	
Iron					**	8	\$	2		23	23	œ		7.		\$:
Isabella	16,011	8,597	7,414		146	482	72	8	•	8	8	88		252		110	;
Jackson	45,232	28,385	21,847		387	579	8	22		9	8	98		83		5	:
Kalamazoo	35,281	17,875	17,408		874	629	342	8		75 26 26	ĸ	191		88		176	
Kalkaska	4,498	2,470	2,028		22	102	7	28	:	3	23	8		8		25	
Kent	84,600	43,467	41,188		1,048	2,079	1,083	8		1,004	582	472		1,075		224	
Кеwеепаw	4,667	2,551	2,116		**	118	73	\$		28	ಷ	9		88	8	23	
Lake	7,539	4,528	8,011		8	8	S	28		83	81	2		22	11	3 8	
Lapeer	30,057	15,568	14,489		247	48 1	188	217	ေ	35	111	721	7	88	144	88	7
Leelanaw	7,128	8,842	3,286		28	282	711	81		7 01	Z	26		83	8	8	

The figures with the minus sign placed before them indicate the excess of deaths over births.

EXHIBIT F.—CONTINUED.

	, ñ	Population, 1884.	n, 1884.				Births, 1888.	1888.	-		Deaths, 1888.	1888.		Excess	Excess of Births over Deaths.	s over D	esths.
						-			j.	-							
Counties.			Sex.		Marriages, 1888.			Sex.				Sex.				Sex.	
	Total.	Males.	Fe. males.	Un- known.		Total.	Males.	Fe- malos.	Un- known.	Total.	Males.	Fe- males.	Ch. Khown.	Total.	Males.	Fe- males.	Un- known.
Lenawee	782'67	24,916	24,668		878	889	88	818		. 450	88	210	69	281	22	108	~
Livingston	21,568	11,254	10,814		167	효	151	158		121	3 5	19		153	63	58	
Luce					8	27	9	<u>.</u>		10	10			71	ю	6	
Mackinao	5,171	2,948	2,228	.	\$	25	6	22	-	\$	×	\$	-	92	3	2	
Macomb	81,298	15,978	15,815		251	189	822	88		2	22	27		808	170	188	
Manistee	19,875	10,879	8,996		222	98	88	28		8	142	88		8	258	218	
Maniton	1,198	547	456	195		2	10	10		7	83	643		•	•	••	
Marquette	81,897	17,580	18,817		345	1,049	244	202		8	88	8		280	27.2	8	
Mason	13,221	7,233	5,989		121	38	169	165		11	28	28		218	97	100	
Mecosta	20,597	11,288	9,814		180	875	171	188		158	35	28		22	88	139	-
Menominee	18,120	11,488	7,682	:	243	841	487	4		8	175	133		555	262	112	
Midland	8,776	4,728	4,048		92	8	121	100		8	28	\$		170	101	8	
Missaukee.	8,386	2,036	1,350		88	88	9	 		22	92	93		ž	8	12	:
Monroe	38,858	17,186	16,167		800	670	178	2	69	82	157	22	-	820	181	185	1
Montcalm .	85,356	18,774	18,581	-	3 8	208	815	88		22	811	119		8	8	1	:
Montmorency	845	767	851		91	**	12	71		1	10	69		61	1	27	:
Muskegon	87,554	20,522	17,029	66	421	1,189	617	521	-	197	287	70%		678	988	817	1
Newaygo	18,996	10,684	8,312	:	168	8 2	191	168		112	8	\$		2117	8	221	
Oakland	41,100	20,821	20,279		820	687	292	227		22	108	175		101	28	22	
Oceana	14,519	7,859	6,660		135	282	171	H	-	82	25	7	1	181	84	8	
Оветам	8,637	2,041	1,598	-	22	117	8	67	_	2	92	2		88	22	2	

Ontonagon	4,836	8,329	1,507	-	81	72	28	91	7	83	18	9		8	12	•	4
Osceola	14,001	7,533	6,468	1	128	341	183	86		81	\$	28		122	119	102	
Oscoda	1,374	288	576		18	00	4	→		7	83	67		7	67	67	
Otsego	8,906	2,223	1,683		#	\$	78	8		10	=	œ		3	ន	23	
Ottawa	36,225	18,970	17,255		528	616	444	475		178	981	191		578	792	314	
Presque Isle	4,064	2,168	1,896		22	127	20	128	69	88	8	19	83 ·	88	22	8	
Roscommon	2,588	1,813	775	:	11	æ	17	2		81	22	9		15	10	2	
Saginaw	74,795	41,588	33,207		685	2,156	1,168	198	-	916	667	416	-	1,240	699	57.1	
Sanilac	29,583	15,578	14,005		722	719	980	92		888	**	717		197	908	345	
Schoolcraft	8,846	2,568	1,278		22	102	22	3	-	38	91	=	-	r	88	\$	
Shiawassee	28,078	14,781	18,847		276	88	808	98		182	35	88		187	109	78	
St. Clair	46,783	890,12	22,728	83	445	1,050	222	88		33	8	222		208	287	27	
St. Joseph	26,277	13,295	12,982		201	88	251	181		88	178	165		100	28	23	
Tuscola	80,726	16,126	14,600		233	89	287	818		817	158	159		88	129	128	
Van Buren	30,341	15,877	14,964		274	238	2882	253		848	166	171		195	119	92	
Washtenaw	41,694	21,067	20,627		812	247	290	257		411	292	800		136	88	22	
Wayne	188,966	84,492	94,474		1,967	14,046	7,325	6,715	9	2,301	2,959	2,337	10	8,745	4,386	4,378	1
Wexford	10,518	5,782	4,786		116	256	187	611		88	\$	\$		167	16	76	

The figures with the minas sign placed before them indicate the excess of deaths over births.

BIRTHS, 1888.

The number of births returned in 1888 was 48,952, which was larger than that of any year since the beginning of registration in Michigan. The rate of births to population 26.50 to 1,000 was also larger than that of any other year. The average annual number returned for the ten years, 1878–1887, was 38,704, and the births in 1888 were more than this average by 10,248. This increase is again largely due to the increased number of births returned from Wayne county, and especially from the city of Detroit. In 1886, there were returned from Wayne county 6,388 births, in 1887 there were 10,857, while for the year 1888 there were 14,046, an increase of 3,189 over the number reported in 1887. By reference to Table 1, it will be seen that the increase from Wayne county alone is more than that for the entire State.

According to the system of correction for omissions in the enumeration of births, which has been adopted in previous reports, the number of births returned for 1888 should be increased by about 23 per cent in order to equal the number which probably occurred. In other words, about 80 per cent of the births in 1888 were returned, while for the average of ten years only about 73 per cent were returned.

Years.	Per cent of Births Returned.	Per cent of Births added as correction for Omissions.
1879.	. 68.05	46.91
1880	69.78	43.42
1881	69.76	48.85
1882	74.81	84.57
1883	72,57	87.79
1884	73.24	36.54
1885	72.57	87.80
1886	67.92	47.24
1887	79.01	26.57
1888	81.41	22.84
Average for 10 years.	72.86	87.70

The population of Michigan, according to the State census of 1884, was 1,853,658. When 6,424 has been subtracted, being the number of inhabitants from whom no returns of births were received, it gives 1,847,234 as the number of inhabitants in 1884

represented by the returns of births in 1888. As seen in the following tabular exhibit, the birth-rate was 2.65 for every hundred of the inhabitants, or 26.50 for every thousand. When the returns of births have been corrected for omissions in the enumeration because of late records, they are increased to 60,120 and the birth-rate to 3.25 to every hundred of the population, or 32.50 to every thousand:

	Inhabitants		Births	Per Cent o Inhab	
Sex.	in 1884.— Represented by births in 1888.	returned.	corrected for omissions in enumerating	Births as Returned,	Births Corrected for Omissions,
Total	1,847,284	48,952	60,120	2.65	8.25

The following statistics, in regard to the birth-rates of different countries in Europe, are taken from the Registration Report of Massachusetts for the year 1888:

Eastern Europe (Russia)	49.4	to	1,000
Central Europe			
Southern Europe			
North-western Europe			

The countries having the highest and the lowest birth-rate are as follows:

		Highest.		Lowest.
1.	Russia, 1867-78	49.4	1. Sweden, 1865-82.	30.2
2.	Crotia, 1874-80	45.8	2. Switzerland, 1870-83	. 80.2
8.	Servia, 1879-88	43.6	3. Greece, 1865-82.	28.4
4.	Hungary, 1865-83	43.0	4. Ireland, 1865-83	_ 26.4
5.	Wurtemburg, 1865-83	42.6	5. France, 1870-82.	_ 25.4
	Vérage	44.8	Average	29.0

The average number of births per quarter, month, week, and day, during the year 1888, may be seen in the following tabular exhibit:

Periods of Time.	Births as Returned,	Corrected for Omissions,	Corrected with 37.70 Per Cent.
Per quarter	12,238	15,030	16,852
Per month	4,079	5,010	5,617
Per week	941	1,156	1,296
Per day	184	a 165	185

In Table 1 is given the relation of the birth-rate to the different quarters of the year, the data of 1888 being compared with those of 1885, 1886, 1887, and the average for ten years, 1878–1887. As usual, the third quarter, ending with September, had the largest proportion of births, and the last six months of the year returned more births than the first six months. This is true, not only for each year of the table, but also for the tenyear average, and it is interesting to note with what uniformity it occurs year after year. In Massachusetts the order is the same as in this State, while in England it is the reverse, there being more births recorded in the first six months of the year than the last. In the lower part of the table the returns of births are corrected for omissions, and the third quarter still shows the largest proportion of births.

TABLE I.—Births by Quarters of the year for the years 1885-1888, and the Average for Ten Years, 1878-1887.

	Totals and	18	85.	18	86.	18	87.	18	88.		e for 10 878-1887.
	onths with which Quarters End.	Numb'r.	Per Cent of Total.	Numb'r.	Per Cent of Total,	Numb'r,	Per Cent of Total	Numb'r.	Per Cent of Total,	Numb'r,	Per Cent of Total,
To	tals	42,119	100.00	41,095	100.00	46,226	100.00	48,952	100.00	38,704	100.00
	March	9,227	21.90	8,931	21.78	10,269	22.21	11,146	22.77	8,462	21.86
ਚ	June	10,694	25.39	10,490	25.58	11,522	24.93	12,300	25.12	9,589	24.77
As Returned.	September	11,486	27.27	11,086	26.98	12,608	27.27	13,152	26.87	10,487	27.10
Ret	December	10,676	25.35	10,587	25.64	11,767	25.46	12,309	25.15	10,125	26.16
	Unknown.	36	.09	51	.12	60	.13	45	.09	41	.11
Av	erage a	10,580	25.00	10,274	25.00	11,557	25.00	12,238	25.00	9,676	25,00
То	tals	58,026	100.00	60,484	100.00	58,498	100.00	60,120	100.00	54,091	100.00
	March	14,278	24.61	15,050	24.88	14,222	24.81	14,824	24.66	13,361	24.70
dons	June	15,417	26.57	16,288	26.93	15,096	25.81	15,558	25.87	14,060	25.99
Corrected Omissions.	September	15,267	26.31	15,664	25.90	15,528	26.55	15,759	26.21	14,142	26.14
for O	December	18,028	22.45	13,431	22,21	13,587	28.28	13,939	23.19	12,487	23.09
· 🛎	Unknown	36	.06	51	.08	60	.10	45	.07	41	.08
Av	erage a	14,507	25.00	15,121	25.00	14,623	25.00	15,030	25.00	13,523	25.00

a The number in unknown quarter of year included.

As shown by Table 2, the largest number of births in a single month of 1888 occurred in August, and the smallest in February, the difference being 998. Except for the year 1886, the months of August and September have returned the largest proportion of births for each year of Table 2, and also for the average of ten years. The least number of births are returned for the months of January and February for each year and the average. This would indicate that fewer children are born during these two months, but, as has been explained in previous reports, there is a better registration of the returns for the later than for the earlier months of the year.

TABLE 2.—Births during the years 1886-1888, according to the Returns, the Average for Ten Years, 1878-1887, showing number and Percentage, by months in order of greatest first.

		1886.			1887.			1888.			ge for 10 1878-1887	
	Months.	Numb'r.	Per Cent of Total,	Months.	Numb'r.	Per Cent of Total.	Months.	Numb'r.	Per Cent of Total,	Months.	Numb'r.	Per Cent of Total,
Order.	Total	41,095	100,00	Total	46,226	100.00	Total	48,952	100.00	Total	38,704	100.00
1	Aug	8,781	9.20	Sept	4,331	9.37	Aug	4,514	9.22	Aug	3,602	9.81
2	Dec	3,727	9.07	Aug	4,266	9.28	Sept	4,415	9.02	Sept	3,562	9.20
8	Sept.	3,707	9.02	Dec	4,058	8.78	Oct	4,305	8.79	Dec	3,516	9.08
4	Apr	3,640	8.86	July	4,011	8.68	July	4,223	8.63	Oct	8,415	8.82
5	July	3,598	8.76	Mar	3,987	8.62	Мау	4,214	8.61	July	3,323	8.59
6	Oct	3,540	8.61	May	8,960	8.57	Dec	4,193	8.57	May	3,278	8.47
7	May	3,498	8.51	Oct	3,944	8.53	June	4,133	8.44	Apr	3,237	8.36
8	Mar	3,456	8.41	Apr	3,896	8.43	Mar	4,099	8.37	Mar	3,207	8.29
9	June	8,352	8.16	Nov	3,765	8.14	Apr	3,953	8.08	Nov	3,194	8.25
10	Nov	3,270	7.96	June	3,666	7.98	Nov	3,811	7.79	June .	3,074	7.94
11	Feb	2,858	6.95	Feb.	3,150	6.81	Jan	8,581	7.21	Feb	2,683	6.98
12	Jan	2,617	6.77	Jan	3,132	6.78	Feb	3,516	7.18	Jan	2,572	6.65
	Unk.	51	.12	Ùnk	60	.13	Unk	45	.09	Unk	41	.11
	Av. a	3,425	8.33	Av. a	3,852	8.33	Av. a	4,079	8.83	Av. a	3,225	8.33

a Including births in unknown months.

In Table 3 may be seen the order of the months after the returns of births are corrected for the probable omissions in the enumeration. The order of the months is not the same as in Table 2, but August heads the list in 1888, although March stands at the head in the average. The month of November has the lowest proportion, not only for each year of the table, but also for the ten-year average.

TABLE 3.—Births during the years 1886-1888, and the Average for Ten Years, 1878-1887, as corrected for Omissions in the enumeration, exhibiting the number and Percentage, by Months, in order of greatest first.

		1886.			1887.			1888.			ge for 10 1878-1887	
	Months.	Numb'r,	Per Cent of Total,	Months.	Numb'r.	Per Cent of Total,	Months.	Numb'r.	Per Cent of Total,	Months,	Numb'r.	Per Cent of Total,
Order.	Total_	60,484	100.00	Total	58,498	100.00	Total	60,120	100.00	Total	54,091	100,00
1	Apr	5,815	9.61	Mar	5,428	9.28	Aug	5,410	9.00	Mar	4,946	9.14
2	Mar	5,680	9.39	Aug	5,257	8.99	Mar	5,366	8.93	Apr	4,870	9.00
3	May	5,427	8.97	Sept	5,225	8.93	Мау	5,830	8.87	Aug	4,862	8.99
4	Aug	5,344	8.84	Apr	5,208	8.89	Sept	5,194	8.64	May	4,802	8.88
5	July	5,251	8.68	May :	5,186	8.87	July	5,155	8.57	Sept	4,668	8.69
6	Sept	5,069	8.38	July	5,046	8.63	June	5,136	8.54	July	4,612	8.58
7	June	5,046	8.34	June	4,707	8.05	Apr	5,087	8.46	June .	4,888	8.11
8	Feb	4,828	7.98	Oct	4,657	7.98	Oct	4,969	8.27	Oct	4,846	8.09
9	Oct	4,678	7.74	Dec	4,582	7.83	Jan	4,778	7.95	Feb	4,246	7.85
10	Dec	4,582	7.58	Jan	4,425	7.57	Feb	4,680	7.78	Dec	4,202	7.77
11	Jan	4,542	7.51	Feb	4,369	7.47	Dec	4,655	7.74	Jan	4,169	7.71
12	Nov	4,171	6.90	Nov	4,348	7.48	Nov	4,315	7.18	Nov	3,939	7.28
	Unk	51	.08	Unk	60	.10	Unk	45	.07	Unk.	41	.08
	Av. a	5,040	8.83	Av. a	4,874	8.33	Av. a	5,010	8.88	Av. a	4,508	8.33

a Including births in unknown month.

PROPORTION OF THE SEXES.

In Table 4 may be found the number of births returned from each county of the State during the year 1888, the number in each month of the year, and the number of each sex respectively. According to the statistics here presented, the number of male children born in Michigan during the year 1888, was 25,526, and the number of female children 23,401. In every year the births of males in this State have exceeded the births of females, the ratio of males to females in 1888 being 109 males to every 100 females. For a period of twenty years from 1868 to 1887 the average excess of male births was also 109 males to 100 females.

From an examination of Table 4, it will be seen that a large proportion of the counties have an excess of male births, 58 counties, in 1888, showing an excess of male births, 18 counties an excess of female births, and in six counties the number was equal. Comparing the relative proportion of the sexes in the larger counties of the State where the returns are more complete, it is seen that St. Joseph county has the largest excess of male births, while Mecosta county has the largest excess of female births.

The number of births in 1888, in which the sex was not reported, was 25, which is 45 less than were returned in 1887.

TABLE 4.—Exhibiting, by Counties and by Sex, the Number of Births Returned for the Year, and in each month of the year ending December 31, 1888. (Still-births included.)

								Mor	iths,	1888					
State and Counties.	Sex.	Year, 1888.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October,	November.	December.	Unknown.
State	Totals Males Females Unknown	48,952 25,526 23,401 25	1829	1843 1669	2120 1979	2067	2174 2038	2116 2016	2190 2030	2393 2121	4415 2268 2145 2	2245	1959	2298 1893	24
Alcona	Totals Males Females	62 37 25 23	1 1 2	6 3 3	3 2 1 2	3 1 2 4	5	7 3 4	11 8 3	5 3 2 3	6 2 4 2	5 4 1	5 1 4	5 4 1	
Alger	Males	10 13	2	2	2	2		1-1-	1	1 2	2	4	1		
Allegan	Totals	767 389 378	25 22	51 26 25	73 39 34	57 36 21	28 36	63 21 42	60 23 37	75 43 32	76 43 33	70 36 34	66 33 33	64 35 29	1
Alpena	Totals Males Females	409 226 183	33 16 17	30 21 9	38 22 16	31 15 16	34 18 16	49 30 19	40 19 21	33 17 16	21 12 9	39 20 19	20 10 10	38 24 14	2 1
Antrim	Totals	202 115 87	11 7 4	17 11 6	19 12 7	21 11 10	20 12 8	11 4 7	16 8 8	21 14 7	16 10 6	22 13 9	16 6 10	12 7 5	
Arenac	Totals	127 63 64	8 5 3	5 2 3	9 5 4	16 6 10	12 6 6	9 3 6	14 10 4	11 3 8	15 10 5	9 3 6	8 2 6	11 8 3	
Baraga	Totals Males	74 36 38	7 4 3	1 3	6 3	5 3 2	11 5 6	5 2 3	8 3 5	5 3 2	4 2 2	6 4 2	7 3 4	6 3	
Barry	Totals	362 192 170	28 14 14	23 10 13	28 14 14	29 26 3	30 16 14	28 10 13	27 18 14	38 23 15	34 15 19	34 18 16	39 20 19	29 13 16	
Bay	Totals Males Females	1,491 788 703	116 60 56	116 64 52	131 69 62	112 68 44	126 66 60	120 64 56	135 66 69	136 74 62	122 61 61	129 70 59	125 62 63	122 63 59	1

TABLE 4.—Continued.—Births by Counties, by Months, and by Sex.

								Mon	ths,	1888.	Ĵγ				
Counties.	Sex.	Year, 1888.	January.	February.	March.	April.	May.	June,	July.	August.	September.	October.	November,	December,	Unknown.
	(Totals	102	7	7	5	12	7	14	7	7	9	8	8	11	
Benzie	Males	63	5	5	3	6	4	8	3	4	7	6	5	7	
	Females	39	2	2	2	6	3	6	4	3	2	2	3	4	
	(Totals	610	43	54	56	54	50	48	48	44	58	49	47	64	
Berrien	Males	322	20	31	30	30	25	32	28	19	20	23	29	35	1.0
	Females	288	23.	23	26	24	25	16	20	25	33	26	18	29	
	(Totals	351	16	25	36	42	22	27	32	37	23	29	32	30	
Branch	Males	176	6	14	19	16	13	18	16	22	8	12	20	17	
	Females	175	10	11	17	26	9	14	16	15	15	17	12	13	
	(Totals	651	40	39	58	58	59	44	65	58	75	58	47	54	
Calhoun	Males	334	20	19	34	36	30	18	31	27	46	29	15	29	
	Females	317	20	20	24	22	29	26	34	26	29	29	32	25	
	(Totals	338	24	19	19	34	17	25	35	36	44	28	35	22	
Cass	Males	190	16	10	11	21	8	16	19	22	26	14	14	13	
	Females	148	8	9	8	13	9	9	16	14	18	14	21	9	
	(Totals	143	4	9	13	15	9	11	17	17	16	11	11	8	
Charlevoix	Males	72	2	4	4	10	3	5	10	8	11	7	4	3	10
Section of the sectio	Females	71	2	5	9	5	6	6	7	9	5	4	7	5	
	(Totals	317	29	24	27	25	32	31	31	25	22	22	17	32	
Cheboygan	Males	159	16	6	10	11	9	21	22	15	8	11	11	19	
	Females	158	13	18	17	14	23	10	9	10	14	11	6	13	
7	(Totals	178	19	14	17	15	9	20	13	25	20	8	3	15	
Chippewa	Males	92	12	6	6	11	5	9	4	17	13	4		5	
	Females	86	7	8	11	4	4	11	9	8	7	4	3	10	
	(Totals	158	10	12	10	18	17	17	12	13	14	10	8	11	
Clare	Males	68	5	5	4	9	3	10	4	6	11	4	3	4	
	Females	85	5	7	6	9	14	7	8	7	3	6	5	7	
	Totals	458	32	30	29	36	37	43	43	42	42	34	40	50	
Clinton	Males	220	16	19	14	16	16	20	22	14	22	18	18	25	
100 100 100 100 100 100 100 100 100 100	Females	238	16	11	15	20	21	23	21	28	20	16	22	25	
	Totals	16		1	2	1		2			1	5	3	1	
Crawford	Males	9		1	1	1		1			1	3	1		
	Females	7			1			1				2	2	1	
	Totals	878	24	27	29	40	31	22	27	33	44	25	46	29	
Delta	Males	200	12	10	15	21	16	11	15	18	27	13	24	18	
71-71-71-71-71-71-71-71-71-71-71-71-71-7	Females	178	12	17	14	19	15	11	12	15	17	12	22	11	

TABLE 4.--Continued.—Births by Counties, by Months, and by Sex.

								Mon	ths,	1888.	•				
Counties.	Sex.	Year, 1888.	January.	February.	March.	April.	May.	June,	July.	August.	September,	October.	November.	December.	Unknown.
	Totals	468	20	80	34	48	51	48	39	47	45	39	88	84	
Eaton	Males	225	11	17	17	22	25	25	16	19	21	18	14	20	
140001111111111111111111111111111111111	Females	242	9	18	17	26	25	23	28	28	24	21	19	14	
	Unknown	1					1								
	Totals.	121	11	17	12	14	11	6	12	14	5	5	8	5	1
Emmet	Males	64	6	8	7	8	7	8	4	8	8	1	4	5	
	Females	57	5	9	5	6	4	8	8	6	2	4	4		1
	Totals	541	37	41	85	47	33	49	54	44	42	52	52	53	2
Genesee	Males	265	17	22	20	25	19	25	28	21	23	20	21,	24	
G0110000	Females	275	20	19	15	22	14	24	26	23	19	32	31	29	1
	Unknown	1	ļ					:-		:					1
	Totals	58	5	.8	4	2	6	2	4	8	7	2	8	2	ļ
Gladwin	Males	80	2	7	1		8	1	4	4	8	1	8	1	
	Females	23	8	1	3	2	3	1		4	4	1		1	
•	Totals	251	13	11	13	23	25	31	27	25	22	24	15	21	1
Gogebic	Males	146	11	6	6	10	11	20	19	16	13	18	9	11	1
	Females	105	2	5	7	13	14	11	8	9	9	11	6	10	
	Totals	247	10	15	17	16	20	24	84	85	27	18	11	20	
Grand Traverse	Males	184	4	8	10	9	12	17	17	18	13	8	8	10	
	Females	113	6	7	7	7	8	. 7	17	17	14	10	8	10	
	Totals	478	23	44	40	40	46	46	48	48	42	81	36	88	1
Gratiot	Males	240	12	28	22	17	28	22	22	19	16	15	18	20	1
Granot	Females	231	11	15	18	23	18	24	26	24	26	15	18	13	
	Unknown	2	4	1								1			
	Totals	33 8	20	21	27	27	31	28	28	29	28	84	41	24	
Hillsdale	Males	169	8	7	16	15	16	10	18	17	15	19	20	18	
	Females	169	12	14	11	12	15	18	15	12	13	15	21	11	
	Totals	1,022	82	56	94	66	92	95	91	90	90	64	86	116	
Houghton	Males	554	47	24	60	28	55	46	49	50	46	44	41	64	
	Females	46 8	35	32	34	38	37	49	42	40	44	20	45	52	
	Totals	671	42	39	69	50	59	52	50	76	55	58	59	62	
Huron	Males	845	22	19	30	27	31	21	28	34	33	30	39	81	
•	Females	326	20	20	39	28	28	31	22	42	22	28	20	31	
	Totals	491	36	34	32	31	44	43	46	48	54	36	37	49	1
Ingham	Males	245	17	19	19	14	26	16	28	23	19	19	21	28	1
	Females	246	19	15	13	17	18	27	18	25	35	17	16	26	

TABLE 4.—Continued.—Births by Counties, by Months, and by Sex.

	•							Mon	nths	, 1888	1.				
Counties.	Sex.	Year, 1888.	January.	February.	March.	April.	May.	June.	July.	August,	September,	October,	November.	December.	Unknown
	Totals	440	33	15	32	49	48	37	35	38	46	35	37	34	
Ionia	Males	221	15	6	14	24	27	19	18	25	21	14	17	21	
	Females	219	18	9	18	25	21	18	17	13	25	21	20	13	1
	Totals	300	16	34	26	33	30	24	14	26	32	19	20	26	
losco	Males	151	8	16	12	12	16	15	9	12	15	10	13	13	
	Females	149	8	18	14	21	14	9	5	14	17	9	7	13	-
	(Totals	97	6	11	5	12	6	18	9	6	4	5	5	10	
ron	Males	48	3	6	2	5	4	5	4	2	1	2	5	4	
	Females	54	3	5	3	7	2	13	5	4	3	3		6	
	Totals	432	29	28	32	35	41	41	48	47	42	27	39	23	
sabella	Males	224	12	10	14	20	19	21	33	25	20	14	19	14	
	Females	208	17	18	18	15	22	17	15	22	22	13	20	9	
	Totals	579	43	49	55	46	46	44	55	58	54	38	43	47	
ackson	Males	308	21	30	27	25	29	25	31	26	31	22	18	22	
•	Females	271	22	19	28	21	17	19	24	32	23	16	25	25	
	Totals	679	35	56	53	62	53	60	53	67	69	57	80	53	
Kalamazoo	Males	342	23	28	25	36	29	32	25	26	87	25	32	24	
	Females	337	12	28	28	26	24	28	28	41	32	32	28	29	
	Totals	102	6	8	8	5	6	13	11	14	11	.5	9	6	
alkaska	Males	44	1	3	5	2	2	6	6		2	3	4	3	
	Females	58	5	5	3		4	7	5		9	2	5	3	
	Totals	2,079	144	142	168	161	168	174	190	192	205	179	152	202	
Cent	Males	1,083	79	71	94	86	87	78	98	101	105	94	74	114	
	Females	996	65	71	74	75	81	96	92	91	100	85	78	88	
	Totals	118	11	7	9	11	9	9	9	13	9	9	10	12	
eweenaw	Males	78	8	5	3	4	6	6	7		6	4	6	10	
	Females	45	3	2	6	7	3	3	2		3	5	4	2	
	Totals	90	4	8	13	13	7	6	7		7	10	4	7	
a.ke	Males	35	2	2	4	7	4	2	2	4	2	4	1	1	
	Females	55	2	6	9	6	3	4	.5	1	5	6	3	6	
	Totals	481	31	26	31	32	43	47	56	59	46	42	27	41	
apeer	Males	261	14	14	17	21	23	23	30	31	27	17	16	28	22
. pool	Females	217	14	12	14	11	20	24	26	28	19	25	11	13	
	Unknown	3	3			-									
	Totals	232	9	21	19	21	13	23	24	28	27	24	11	12	
eelanaw	Males	114	4	11	7	11	7	14	11	17	12	10	6	4	
	Females	118	5	10	12	10	6	9	13	11	15	14	5	8	

TABLE 4.—Continued.—Births by Counties, by Months, and by Sex.

Counties.								Mor	ths,	1888					
	Sex.	Year, 1888.	January.	February,	March.	April.	May.	June.	July.	August.	September.	October,	November,	December,	Unknown.
	(Totals	632	35	47	54	70	48	55	48	68	47	64	46	46	4
Lenawee	Malés	320	16	21	26	38	28	26	24	31	22	43	20	22	9
	Females	312	19	26	28	32	20	29	24	37	25	21	26	24	1
	(Totals	304	14	26	24	27	35	30	24	32	25	18	25	24	
Livingston	Males	151	5	12	8	14	19	13	13	17	13	10	12	15	
	Females	153	9	14	16	13	16	17	11	15	12	8	13	9	
	(Totals	19	2	2	2	1	2	2	1		3	1	2	1	
Luce	Males	10	1	1			2	2	1		2		1	1.3	
	Females	9	1	1	2	1					1	1	1	1	
	(Totals	120	9	4	11	13	11	4	7	10	10	9	11	19	2
Mackinac	Males	67	6	2	6	10	7	3	4	7	2	8	8	9	1
	Females	52	3	2	5	3	4	1	3	3	8	6	3	10	1
	Unknown	1					100	1	_						1
	(Totals	687	45	61	58	44	52	50	65	58	58	61	66	69	1
Macomb	Males	352	21	38	26	22	24	23	36	24	30	38	30	40	
	Females	335	24	23	32	22	28	27	29	34	28	23	36	29	-
	(Totals	696	27	48	61	52	49	61	73	79	58	73	57	58	
Manistee	Males	395	18	25	34	26	23	41	41	44	32	44	28	39	
manistee	Females	301	9	23	27	26	26	20	32	35	26	29	29	19	
	(Totals	10		20		1	1	2		2	-	1	1	2	
Manitou	Males	5		*		1			1	1		1	1	1	
Manitou	Females	5				•	1	2		1	- 8		100	1	
	(Totals		54	78	101	87	106	101	83	89	77	89	92	92	
Marquette	Males	544	26	40	61	47	50	46	46	45	35	45	50		
marquette	Females	505	28	38	40	40	56	55	37	44	42	44	42	53 39	
	(Totals	334	13	28	24	24	23	31	27	47	37	32	23	25	
Mason	Males		7	17	9	12	15	17	150	22					
Mason	ALCOHOL: NO PERSON NA	169	10	196	000	12	8	14	11 16	25	18	12 20	15	14	****
	(Totals	165	6	11 22	15 29	28	38	34	38	30	19	39	35	11	****
Manager	Totals	375	17		1	150	1	135	53	E	-	16	152	30	
Mecosta	Males	177	6	8	12	12	14	18	21	13	25	18	14	16	****
	Females	198	11	14	17	16	24	16	17	17	10	21	21	14	2
Voncentinos	Totals	841	63	72	80	82	78	70	67	64	74	60	69	61	1
Menominee	Males	437	37	38	41	38	38	31	33	32	37	38	36	37	1
	Females	404	26	34	39	44	40	39	34	82	37	22	33	24	
	Totals	260	10	16	18	29	20	19	36	20	23	24	16	29	
Midland	Males	151	8	9	12	16	10	8	22	12	10	13	10	21	****
	Females	109	2	7	6	13	10	11	14	8	13	11	6	8	V1 10

TABLE 4.—Continued.—Births by Counties, by Months, and by Sex.

Counties.								Mon	ths,	1888.									
	Sex.	Year, 1888.	January.	February.	March.	April.	May.	June.	July.	August,	September,	October,	November.	December.	Unknown,				
	Totals	- 86	9	2	2	5	9	6	7	8	9	9	6	14					
Missaukee	Males	49	7		1	4	7	5	3	2	8	6	1	5					
	Females	37	2	2	1	1	2	1	4	6	1	3	5	9					
	Totals	670	44	37	59	39	53	65	59	60	71	57	74	52					
	Males	341	22	19	33	25	24	33	27	32	31	26	39	30					
Monroe	Females	327	22	18	26	14	29	32	32	28	39	31	34	22					
	Unknown	2									1	0.1	1						
	Totals	598	43	35	43	48	49	54	63	63	55	45	41	58					
Montealm	Males	315	22	16	28	16	32	28	33	34	26	22	24	34					
***************************************	Females	283	21	19	15	32	17	26	30	29	29	23	17	24					
Montmorency	Totals	26	4	1	3	2	4	3	1	2	4	1	1	1	1				
	Males	12	2	***	2	15	3	2	1			1	1	•					
	Females	14	2		1	2	1	1	100	2	4	1		1					
	(Totals		95	82	92	81	16	92	00	115	100	120	100	10					
	Males		48	42	59	44	81 45		83		85	7	52	113					
Muskegon	Females	521	100	175	100	100		43	51	64	47	57	1	65					
		1.00	47	40	88	37	36	48	32	51	38	63	48	48					
	Unknown	1 000			00			1		200			07						
	Totals	329	25	20	23	32	28	22	29	28	30	31	37	24					
Newaygo	Males	-	17	10	10	16	12	7	13	16	12	13	20	15	1				
	Females	168	8	10	13	16	16	15	16	12	18	18	17	9					
	Totals	489	23	33	45	46	38	41	34	45	57	50	39	37					
Oakland	Males	262	13	22	22	23	14	25	16	27	29	32	21	18	***				
	Females	227	10	11	23	23	24	16	18	18	28	18	18	19	1				
	Totals	282	17	15	29	21	20	31	22	24	35	30	24	14					
Oceana	Males	141	14	6	18	10	8	14	9	11	18	14	9	10					
	Females	141	3	9	11	11	12	17	13	13	17	16	15	4					
	Totals	117	12	4	8	13	5	9	11	16	10	7	10	12					
Ogemaw	Males	68	9	2	5	9	3	4	6	7	7	5	3	8					
	Females	49	3	2	3	4	2	5	5	9	3	2	7	4					
	Totals	54		. 3	3	4	8	7	6	1	3	6	5	8					
Intonegon	Males	34		. 2	2	2	6	5	4	1	2	5	2	3					
Ontonagon	Females	. 16			1	2	2	2	1		1	1	2	4	23.				
	Unknown	4		. 1			1000		1				1	1					
	(Totals	341	19	19	38	30	24	36	31	39	38	25	22	20					
Osceola	Males	183	10	7	20	15	12	14	19	24	25	15	13	9					
	Females	158	9	12	18	15	12	22	12	15	13	10	9	11					

TABLE 4.—CONTINUED.—Births by Counties, by Months, and by Sex.

Counties.								Mon	ths,	1888					
	Sex.	Year, 1888.	January.	February.	March.	April.	May.	June,	July.	August.	September.	October,	November.	December.	Unknown.
	(Totals	8	****				1	8	1	1		1		1	
Oscoda	Males	4					1	2						1	
	Females	4						1	1	1		1			
	Totals	64	3	5	7	7	9	7	10	8	5	4		3	1
Otsego	Males	34	2	2	3	3	5	5	7	2	1	2		2	
	Females	30	1	3	4	4	4	2	3	1	4	2		1	1
	Totals	919	65	62	87	69	68	92	94	77	84	78	65	77	1
Ottawa	Males	444	28	36	48	23	33	42	47	46	35	44	36	30	1
	Females	475	37	26	44	46	35	50	47	31	49	34	29	47	
	(Totals	127	13	8	14	5	9	8	10	13	15	15	11	6	
Presque Isle	Males	70	5	4	9	1	5	5	4	9	11	8	4	5	
	Females	8 5	8	4	5	3	4	3	5	4	4	7	7	1	
	Unknown	2				1		1	1	3304				201	
Roscommon	(Totals	33	6	5	1	2	1	2	4	1	2	2	8	4	
	Males	17	3	3	1	1		1	2		1	1	3	1	
	Females	16	3	2		1	1	1	2	1	1	1		3	
	(Totals	2,156	133	169	163	184	180	196	191	227	216	160	167	168	2
	Males	1,168	71	88	80	89	101	102	97	126	129	91	100	93	1
Saginaw	Females	987	62	81	83	95	79	94	94	101	86	69	67	75	1
	Unknown	1			0.0				1		1		0.	10	
	(Totals	719	37	55	56	69	58	55	66	71	70	61	59	62	1
Sanilac	Males	360	15	32	35	34	27	27	34	31	36	28	27	34	****
	Females	359	22	23	21	35	31	28	32	40	34	33	32	28	-
	(Totals	102	4	12	14	9	8	7	4	11	5	8	9	10	1
	Males	56	3	4	8	4	2	5	1	8	2	5	5	9	
Schoolcraft	Females	45	1	8	6	4	6	2	3	3	3	3	4	1	1
	Unknown	1	100	0	0	1		-	3	9	0	9	*	1	1
	(Totals	369	24	19	20	30	36	36	35	38	41	22	32	35	1
Shiawassee	Males	203	12	16.6	15.00	100	1	100	100			100	200	133	,
Silla wassee	Females	166	12	11	11	16	24	20	17	17	21	11	18	24	
			160	8	9	14	12	16	18	21	7.	11	14	11	
St Clair	Totals	1,050	78	69	78	52	83	73	104	115	95	103	101	97	2
St. Clair	Males	557	40	42	37	29	44	37	55	73	51	52	54	42	1
	(Females	493	38	27	41	23	39	36	49	42	44	51	47	55	1
G. 7 1	Totals	438	26	29	37	45	30	33	33	39	43	51	37	85	
St. Joseph	Males	251	16	18	20	27	22	18	20	20	23	31	18	18	-327
	(Females	187	10	11	17	18	8	15	13	19	20	20	19	17	****

VITAL STATISTICS OF MICHIGAN, 1888.

TABLE 4.—Continued.—Births by Counties, by Months, and by Sex.

Counties,								Mon	ths,	1888.		-								
	Sex.	Year, 1888.	January.	February.	March.	April.	May.	June,	July.	August,	September,	Oetober.	November,	December.	Unknown,					
n n	Totals	605	34	25	46	55	55	55	56	65	56	54	56	48						
Tuscola	Males	287	18	15	23	21	23	28	28	31	25	29	16	30						
	Females	318	16	10	23	34	32	27	28	34	31	25	40	18						
Van Buren	Totals	538	39	38	45	47	41	39	45	61	58	46	29	48	2					
	Males	285	17	19	28	30	25	23	27	31	28	20	10	26	1					
	Females	258	22	19	17	17	16	16	18	30	30	26	19	22	1					
	Totals	547	38	41	45	37	43	45	41	39	71	40	59	48						
Washtenaw	Males	290	22	21	22	20	20	30	20	20	35	24	32	24						
	Females	257	16	20	23	17	23	15	21	19	36	16	27	24						
	Totals	14,046	1264	1064	1216	1071	1312	1128	1098	1158	1159	1371	984	1216	5					
Wassa	Males	7,325	642	566	601	573	662	596	554	633	587	709	525	678	4					
Wayne	Females	6,715	622	496	615	497	649	532	543	525	572	662	459	542	1					
	Unknown	6		2		1	1		1					1						
	Totals	256	20	25	25	20	18	18	30	25	23	17	15	20						
Wexford	Males	137	11	8	15	12	10	11	17	14	11	8	10	10						
	Females	119	9	17	10	8	8	7	13	11	12	9	5	10						

Table 5 shows the number of inhabitants, the number of births, the birth-rates, and the proportion of the sexes among the different races in Michigan. It is unfortunate in the study of this table that the population is not given for the year in which the returns are made. The census returns of 1884 are the only trustworthy basis on which to make the computations of the present work. The increase in population has, no doubt, been considerable, and this should be considered when comparisons are made with previous years.

By an examination of the column headed "Per cent of children born to inhabitants," it will be observed that the birth-rate is about the same for the white inhabitants as the average for all colors, and greater than the average among the blacks, which was also true for the year 1887.

The birth-rate among the black and mulatto inhabitants, which includes all of African descent, was less than that of the average for all races or the whites. By removing the decimal point one place to the right it shows the birth-rate to each thousand inhabitants. When this is done, there were 26.6 births to each thousand among the white; 34.3 among the black, 13.0 among the mulatto; 19.1 among the indian, and 22.6 among the black and mulatto taken together.

An examination of Table 6, shows much that is interesting and instructive in regard to the birth-rate in the different counties of the State. In this table the births and birth-rate of each county may be compared with those of other counties and also with that of the State as a whole. Some allowance should be made, in the study of this table, for defective registration which is probably greater in some counties than in others. Under no system of registration yet devised has there been a complete record of all the births in a county or State. It is this greater or less number as the case may be, depending very much upon the official who does the collecting of the returns, that affects the birth-rate not only in the town from which the returns come but also that for the entire State. Those counties showing the highest birth-rates for the year 1888, according to the returns, were Alpena, Bay, Cheboygan, Delta, Houghton, Manistee, Marquette, Menominee, Muskegon and Wayne. Those showing the lowest were Allegan, Berrien, Branch, Eaton, Genesee, Hillsdale, Jackson, Lenawee, Oakland, Shiawassee and Washtenaw.

Each year the returns show about the same representation, the first named counties having the highest birth-rates, and the latter counties show a rate considerably less than that of the State as a whole.

These facts indicate that in the manufacturing and mining towns and cities the birth-rate is highest, while in the towns and cities where little or no manufacturing is carried on, and agricultural interests largely predominate, the birth-rate is much lower. This leads to the conclusion that mercantile, industrial and manufacturing pursuits have a greater attraction for the younger element of our population than the more quiet work on our farms, and thus the young men and women are drawn from the country into the cities. A large proportion of our foreign population is also found in these manufacturing centers and the percentage of births from this class is usually very large.

TABLE 5.—Exhibiting, by Color and Sex, the Population of Michigan June 1, 1884, the number of Births returned for the year 1888, the Per Cent of Births to Population, and the Per Cent of Births of each Sex to the total of both Sexes. (Still-births included.)

Race or Color.	Sex.	Population June 1, 1884, Represented by Births in 1888.	Children Born in 1888,	Per cent of Births of each Color to Total of all Colors by Sex.	Per Cent of Children Born to Inhabitants,	Per Cent of each Sex to Children of both Sexes,	Inhabita'ts to one child born, by Color and Sex,
	Totals	a 1,847,234	48,952	100.00	2.65		37.74
	Males	970,609	25,526	100.00	2.63	52.17	38.02
All colors	Females	876,419	28,401	100.00	2.67	47.88	87.45
	Unknown	206	25	•			
	Totals.	1,824,196	48,463	99.00	2.66		87.64
	Males	958,639	25,284	99.05	2.64	52.19	37.91
White	Females	865,547	23,162	98.98	2.68	47.81	37.37
	Unknown	10	17				
	Totals	6,855	235	.48	8.43		29.17
Black	Males	3,691	115	.45	3,12	48.94	32.10
	Females	3,164	120	.51	3.79	51.06	26.37
	Totals	8,257	107	.22	1.30	:	77.17
Mulatto	Males	4,201	58	.22	1.38	54.21	72.48
	Females	4,056	49	.21	1.21	45.79	82.78
•	Totals	6,815	130	.27	1.91		52.42
Indian	Males	3,531	63	.25	1.78	48.46	56.05
	Females	3,284	67	.29	2.04	51.54	49.01
	Totals	1,041	17	.03	1.63		61.24
Unknown color	Males	477	6	.03	1.26	66.67	79.50
OHEHOWII COIOF	Females	368	8	.01	.82	83.33	122.67
	Unknown	196	8				
	Totals	15,112	842	.70	2.26		44,19
Black and mulatto.	Males	7,892	173	.67	2.19	50.58	45.62
	Females	7,220	169	.72	2.34	49.42	42.72

a Includes 70 Asiatic males.

TABLE 6.—Exhibiting, for the State and Counties of Michigan, by Sex, the Population in 1884, the Per Cent of Births in 1888 to Population the Number of Males to 100 Females, and by Sex and Color, the Births returned for 1888. (Still-births included.)

	s to		rths of	1884, ed by	rths of oppula-	Co	olor,—Ch	ildren	born	in 1888	
State and Counties.	Births,—Males 100 females.	Sex.	Per cent of births o each sex to total o both sexes,	Population in 1884, represented by births in 1888.	Per cent of births of each sex to popula- tion of same sex.	Total of all colors.	White.	Black,	Mulatto,	Indian.	Unknown.
		Totals		1,847,234	2.65	48,952	48,463	235	107	130	17
State	109	Males	52.17	970,609	2.65	25,526	25,284	115	58	63	. 6
50400	108	Females	47.88	876,419	2.67	28,401	23,162	120	49	67	3
		Unknown		206	 	25	17				8
		(Totals		4,028	1.54	62	62				
Alcona	148	⊀ Males	59.68	2,428	1.52	37	87				
		Females	40.82	1,600	1.56	25	25				
		Totals				23	21			2	
Alger a	77	Males	43.48			10	9			1	
		Females	56.52		ļ <u> </u>	13	12			1	
		Totals		38,666	1.98	767	762	2	8		
Allegan	103	Males	50.72	20,052	1.94	389	387	1	1		
		Females	49.28	18,614	2.03	378	875	1	2		
		Totals		12,683	3.22	409	409				-
Alpena	123	Males	55.26	6,990	3.23	226	226				
		Females	44.74	5,693	3.21	183	183				
		Totals		8,761	2.31	202	200		2		
Antrim	132	Males	56.93	4,736	2.43	115	113		2		
		Females	43.07	4,025	2.16	87	87				
		Totals		4,027	8.15	127	127	 			
Arenac	98	Males	49.61	2,319	2.72	63	68				
		Females	50.39	1,708	3.75	64	64				
		Totals		8,089	2.44	74	67			7	
Baraga	94	Males	48.65	1,819	1.98	36	33	 		8	
		Females	51.85	1,220	8.11	38	34			4	
		Totals		24,102	1.50	362	362				
Barry	118	Males	58.04	12,507	1.54	192	192				
		Females	46.96	11,595	1.47	170	170				

a Organized since census was taken.

TABLE 6.—Continued.—Births by Counties, by Sex, and by Color.

	3		the of	1884, ed by	rths of opula- sex.	Col	lo r ,—Ch	ildren	born	in 1888	•
Counties,	Births,—Males 100 females.	Sex.	Per cent of bliths cach sex to total or both sexes.	Population in 1884, represented by births in 1888.	Per cent of births of each sex to popula- tion of same sex.	Total of all colors,	White,	Black,	Mulatto,	Indian,	Unknown.
		(Totals		51,221	2.91	1,491	1,489	2			
Bay	112	Males	52.85	28,215	2.75	788	787	1			
		Females	47.15	23,006	3.06	703	702	1			
		(Totals		4,389	2.32	102	100	1	1		
Benzie	162	Males	61.76	2,349	2.68	63	61	1	1		
		Females	38.24	2,040	1.91	39	39				
		(Totals		37,776	1.61	610	608	. 1	1		
Berrien	112	Males	52.79	19,225	1.67	322	322				
	7	Females	47.21	18,551	1.55	288	286	1	1		
		(Totals		27,661	1.27	351	351				
Branch	101	Males	50.14	14,042	1.25	176	176				
Dranen	101	Females	49.86	13,619	1.28	175	175				
		(Totals	40.00		100		644	2	5	******	*****
		1	E1 01	41,585	1.57	651				*****	*****
Calhoun	105	Males	51.31	21,297	1.57	334	330	1	3		
		Females	48.69	20,285	1.56	317	314	1	2	*****	
		Unknown	*******	3	,;;,,,,,,					.,~;;	*****
		Totals	•••••	21,202	1.59	338	304	31	2	1	*****
Cass	128	Males	56.21	10,886	1.75	190	172	16	_2		9-2-4-
		Females	43.79	10,316	1.43	148	132	15		1	
		Totals		9,275	1.54	143	137			6	
Charlevoix	101	Males	50.35	5,030	1.43	72	69			3	
		Females	49.65	4,245	1.67	71	68			3	
		Totals	40,000	9,946	3.19	317	311			6	
Cheboygan	101	Males	50.16	5,503	2.89	159	154			5	
	100	Females	49.84	4,443	3.56	158	157			1	
		Totals		7,407	2.40	178	171			7	
Chippewa	107	Males	51.69	4,121	2.23	92	89			3	****
		Females	48.31	3,286	2.62	86	82			4	
		Totals		5,549	2.76	158	158				
Clare	80	Males	44.44	3,251	2.09	68	68				
		Females	55.56	2,298	3.70	85	85				
		(Totals		27,135	1.69	458	458			1,00	
Clinton	92	Males	48.03	14,034	1.57	220	220				
		Females	51.97	13,101	1.82	238	238		1		
		(Totals	1 - 1	2,389	.67	16	16				1
Crawford	129	Males	KR 95			9	9			*****	
Clawford.	129	The second of the last	56.25	1,381	.65				*****		***
		Females	43.75	1,008	.69	7	7				

TABLE 6.—Continued.—Births by Counties, by Sex, and by Color.

- J					•						
•	1 20	į	frths of total of	1884 ed b	ths o	Co	olor,—Ch	ildren	born :	in 1888	•
Counties.	Births,—Males 100 females.	Sex.	Per cent of births each sex to total both sexes.	Population in 1884, represented by births in 1888.	Per cent of births of each sex to population of same sex.	Total of all colors.	White,	Black.	Mulatto.	Indian,	Unknown,
		(Totals		9,992	3.78	378	376		1	1	
Delta	112	Males	52.91	5,876	3.40	200	200	•]		
	! 	Females	47.09	4,116	4.32	178	176		1	1	
	ļ :	Totals		81,802	1.47	468	467		1		
W-4	98	Males	48.18	16,210	1.89	225	225				
Eaton	95	Females	51.82	15,592	1.55	242	241		1		
•		Unknown			 •	1	1				
		Totals		7,944	1.52	121	96			25	
Emmet	112	Males	52.89	4,095	1.56	64	50			14	
		Females	47.11	3,849	1.48	57	46			11	
		Totals		38,776	1.40	541	530	4	6		1
0		Males	49.07	19,782	1.34	265	258	4	8		
Genesee	96	Females	50.98	18,994	1.45	275	272		8		
		Unknown			 	1					1
		Totals		1,539	3.44	58	58				
Gladwin	130	Males	56.60	899	3.34	30	30				
		Females	43.40	640	3.59	23	23	<u> </u>			
		Totals				251	251				-\
Gogebic a	139	Males	. 58,17			146	146				.
		Females	41.83			105	105				.
		Totals		12,092	2.04	247	247				
Gr. Traverse	119	Males	54.25	6,522	2.05	134	134				
:		Females	45.75	5,570	2.03	118	113				
		Totals		25,049.	1.89	473	470	1	2	<u>-</u> -	
		Males	50.96	18,204	1.82	240	240				
Gratiot	104	Females	49.04	11,845	1.95	231	228	1	2		
		Unknown .			! 	2	2				
		(Totals		31,686	1.07	338	837	 	1		. .
Hillsdale	100	Males	50.00	15,911	1.06	169	169				
		Females	50.00	15,775	1.07	169	168		1		
		(Totals		26,146	8.91	1,022	1,021	1			
Houghton	118	Males	54.21	14,168	3.91	554	553	1			
_		Females	45.79	11,978	3.91	468	468				
		Totals		24,521	2.74	671	671				
		Males	'	12,934	2.67	345	345				
Huron	106	Females	48.58	11,585	2.81	1	326				
		Unknown				l :	l	1			
					· ••						

a Organized since census was taken.

TABLE 6.—Continued.—Births by Counties, by Sex, and by Color.

	2		rths of otal of	1884, ed by 3,	opula-	Col	or,—Ch	ildren	born i	in 1888	T
Counties.	Births,—Males 100 females.	Sex.	Per cent of births of each sex to total of both sexes.	Population in 1884, represented by births in 1888.	Per cent of births of each sex to popula- tion of same sex,	Total of all colors.	White.	Black,	Mulatto.	Indian,	Unknown,
		(Totals		34,939	1.41	491	488	2	1		
Ingham	99	Males	49.90	17,917	1.37	245	244	1			
	,	Females	50.10	17,022	1.45	246	244	1	1		
		(Totals		32,559	1.35	440	439		1		
Ionia	101	Males	50.23	17,057	1.30	221	220		1		
	100	Females	49.77	15,502	1.41	219	219				
		(Totals		10,602	2.83	300	299		1.		
Iosco	101	Males	50.33	6,060	2.49	151	151				
		Females	49.67	4,542	3.28	149	148		1		0
		(Totals				97	97				
Iron a	80	Males	44.33			43	43				
0.0000000000000000000000000000000000000	-	Females	55.67			54	54				
		(Totals	3.00	16,011	2.70	432	419		1	12	
Isabella	108	Males	51.85	8,597	2.61	224	217		1	6	
2000000	200	Females	48.15	7,414	2.81	208	202			6	
		(Totals	10.10	45,232	1.28	579	567	2	1		9
Jackson	114	Males	53.20	23,385	1.32	308	301	1			
o ackson		Females	46.80	21,847	1.24	271	266	1	1	******	
		(Totals	100000	35,281	1.92	679	671	4	4		
Kalamazoo.	101	Males	50.87		1	1000		1	100	*****	
Kalamazoo	101	1	1	17,875	1.91	342	338	3	1		
		[Females	49.63	17,406	1.92	337	383	1	3		
. v. v.		Totals	10.44	4,076	2.50	102	102	*****	*****	******	*****
Kalkaska	76	Males	43.14	2,229	1.97	44	44		*****		
		Females	56.86	1,847	3.14	58	58	1000			
4.00	262	Totals		84,600	2.46	2,079	2,068	5	4	2	
Kent	109	Males	52.09	43,467	2.49	1,083	1,074	4	3	2	4007-
		Females	47.91	41,133	2.42	996	994	1	1		****
	100	Totals.	*****	4,667	2.53	118	118	*****			
Keweenaw	162	Males	61.86	2,551	2.86	73	78	****	******	-	****
		Females	38.14	2,116	2.13	45	45				
		Totals	******	6,894	1.31	90	90				
Lake	64	Males	38.89	4,120	.85	35	35				
		Females	61.11	2,774	1.98	55	55			40.04	****
		Totals		30,057	1.60	481	479			1	1
Lapeer	120	Males	54.60	15,568	1.68	261	261				
Lapeet	120	Females	45.40	14,489	1,50	217	216			1	tion.
		Unknown .		Louis Date		3	2	Cacia			

a Organized since census was taken.

TABLE 6.—Continued.—Births by Counties, by Sex, and by Color.

	3		the of	1884 ed by	the of pula-	Col	or,—Ch	ildren	born i	n 1888	
Counties.	Births,—Males 100 females.	Sex.	Per cent of births ceach sex to total ceach sexes.	Population in 1884 represented by births in 1888.	Per cent of births of each sex to popula- tion of same sex.	Total of all colors,	White,	Black,	Mulatto,	Indian.	Unknown,
		(Totals		7,128	3,25	282	206			26	
Leelanaw	97	Males	49.14	3,842	2.97	114	104			10	*****
		Females	50.86	3,286	3.59	118	102			16	
		Totals		49,584	1.27	632	627	3	2	******	
Lenawee	103	Males	50.68	24,916	1.28	320	317	1	2		
		Females	49.37	24,668	1.26	312	310	2			
		(Totals		21,568	1.41	304	304				
Livingston	99	Males	49.67	11,254	1.34	151	151				
		Females	50.83	10,814	1.48	153	153				
		(Totals				19	19				
Luce. *	111	Males	52.63	 		10	10				
	}	Females	47.37			9	9				
		(Totals		5,171	2.82	120	104			16	
		Males	56.30	2,948	2.27	67	58			9	
Mackinac	129	Females	43.70	2,223	2.34	52	45			7	
		Unknown -				1	1				
		(Totals		31,293	2.20	687	685	2			
Macomb	105	Males	51.24	15,978	2.20	352	351	1			
		Females	48.76	15,815	2.19	335	334	1			
		(Totals		19,875	3.50	696	695			1	
Manistee	131	Males	56.75	10,879	3.63	395	394			1	
		Females	i	8,996	3.35	301	301				
		(Totals		1,198	.80	10	10				
•		Males	50.00	547	.93	5	5				
Manitou	100	Females	50.00	456	1.10	5	5				
	ļ	Unknown		195	1						
		(Totals		31,027	3.38	1,049	1,048		1	1	
Marquette	108	Males	51.86	17,375	3.13	544	544				
·	100	Females	48.14	13,652	3.70	505	504		1		
		(Totals	1	13,221	2.53	334	332			2	
Mason	102	Males	50.60	7,232	2.34	169	169		-	-	
MEMOUR	102	Females	1	5,989	2.76	165	163			2	
		(Totals	i i	19,801	1.89	375	371	4			
Mecosta	89	Males	47.20	1	1.63	177	175	2		*****	
Mecosta	99	1 1	52.80	10,855	i	1,100	196	2	******		
	[(Females	52.80	8,946	2.21	198	196	2			

a Organized since census was taken.

TABLE 6.—Continued.—Births by Counties, by Sex, and by Color.

	9		the of	1884 od by	ths of pula- ex.	C	olor,-C	hildre	born	in 1888	3.
Counties.	Births,—Males 100 females,	Sex,	Per cent of births of each sex to total of both sexes,	Population in 1884 represented by births in 1888.	Per cent of births of each sex to popula- tion of same sex.	Total of all colors.	White.	Black,	Mulatto.	Indian.	Unknown.
		Totals	******	19,120	4.40	841	839			2	
Menominee	108	Males	51.96	11,488	3,80	437	437			******	
		Females	48.04	7,632	5.58	404	402			2	
		[Totals		8,776	2.96	260	255		5		
Midland	139	Males	58.08	4,728	3.19	151	149		2		
		Females	41.92	4,048	2.69	109	106		3		
		(Totals		3,148	2.78	86	86				
Missaukee	132	Males	56.98	1,903	2.57	49	49				
		Females	43.02	1,245	2.97	37	37				
		(Totals		33,353	2.01	670	669		1		
		Males	51.05	17,186	1,98	341	340		1		
Monroe	104	Females	48.95	16,167	2.02	327	327	5.7	201		
		Unknown .	1	40,400		2	2	1		1	
-90		(Totals		35,356	1.69	598	596	3 3 3 3	1 2	7 72	
A		Males	52.68	18,774	1.68	315	315	*****			
Montcalm	111	Females	47.32	16,581	1.71	283	281		2		
		Unknown	41.02	10,001	1.71	200	201		-		
		(Totals		845	3.08	26	26				
	86	Males	46.15	494	2.43	12	12	******			
Montmorency	90		53.85				14	******	*****	200	
		Females		851	3.99	14	1000	2			
				37,554	3.03	1,139	1,137		******		
Muskegon	118	Males	54.22	20,522	3,01	617	616	1			
		Females	45.78	17,029	3.06	521	520	1			*****
		Unknown _	******	3		1	1				
	24	Totals		17,641	1.86	329	328	*****	1		
Newaygo	96	Males	48.94	9,917	1.62	161	161			*****	****
		Females	51.06	7,724	2.18	168	167		1		
33.50		Totals		41,100	1.19	489	487	2	*****		
Oakland	115	Males	53.58	20,821	1.26	262	281	1			
		Females	46.42	20,279	1.12	227	226	1			
		Totals		14,519	1.94	282	278			4	
Oceana	100	Males	50.00	7,859	1.79	141	139			2	
		Females	50.00	6,660	2.12	141	139			2	
		[Totals		3,687	3.22	117	117				
Ogemaw	139	- Males	58.12	2,041	3.33	68	68				
		Females	41.88	1,596	3.07	49	49				

BIRTHS, BY COUNTIES, BY SEX, BY COLOR.

TABLE 6.—Continued.—Births by Counties, by Sex, and by Color.

	\$		ths of tel of	1884 9 d by	ths of pula-	Co	olor,—C	aildren	born	in 1888	3.
Counties.	Births,—Males to 100 females.	Sex.	Per cent of births of each sex to total of both sexes.	Population in 1884 represented by births in 1888.	Per cent of births of each sex to popula- tion of same sex.	Total of all colors.	White,	Black,	Mulatto.	Indian,	Unknown,
		Totals		4,836	1.12	54	52			2	
O-to	213	Males	68.00	3,329	1.02	84	32			2	
Ontonagon	213	Females	32.00	1,507	1.06	16	16				
		Unknown .				4	4				
		Totale		14,001	2.44	341	341				
Osceola	116	Males	58.67	7,588	2.48	183	183				
		Females	46.33	6,468	. 2.44	158	158				
		Totals		73 8	1.08	8	8				
Oscoda	100	Males	50,00	407	.98	4	4				
		Females	50.00	331	1.21	4	4				
		Totals		3,906	1.64	64	64				
Otsego	113	Males	53.18	2,223	1.53	34	34				
		Females	46.87	1,683	1.78	30	30				
		Totals		36,225	2.54	919	916			3	
Ottawa	93	Males	48.31	18,970	2.84	444	443			1	
		Females	51.69	17,255	2.75	475	478			2	
		(Totals		4,064	8.13	127	124	1			
	40=	Males	56.00	2,168	3.23	70	70				
Presque Isle	127	Females	44.00	1,896	2.90	55	54	1			
		Unknown .				2					
		Totals		2,588	1.28	33	33				
Roscommon	100	Males	51.52	1,813	.94	17	. 17				
		Females	48.48	775	2.06	16	16				
		(Totals		74,795	2.88	2,156	2,152		2	2	
		Males	54.20	41,588	2.81	1,168	1,166		1	1	
Saginaw	118	Females	45.80	33,207	2.97	987	985		1	1	
		Unknown .				1	1				
		(Totals		29,583	2.43	719	719				
Sanilac	100	Males	50.07	15,578	2.81	360	360				
		Females	49.93	14,005	2.56	359	359				
		(Totals		3,313	8.08	102	102				
·		Males	55.45	2,210	2.53	56	56				
Schoolcraft	124	Females	44.55	1,103	4.08	45	45				
İ		Unknown .				1	1				
İ		(Totals		28,078	1.81	369	367		2		
Shiawassee	122	Males	55.01	14,731	1.38	203	203		0.0		
		Females	44.99	13,347	1.24	166	164		2	1	1000

TABLE 6.—CONTINUED.—Births by Counties, by Sex, and by Color.

	to 100		ths of	1884 ed by	the of pula- ex.	Co	lor,—Ch	ildren	born i	n 1888.	
Counties.	Births,—Males to 100 females.	Sex.	Per cent of births each sex to total both sexes.	Population in 1884 represented by births in 1888.	Per cent of births of each sex to popula- tion of same sex.	Total of all colors.	White.	Black,	Mulatto.	Indian.	Unknown,
		Totals		46,783	2,24	1,050	1,049		1		
		Males	53.05	24,058	2.32	557	556		1		
St. Clair	113	Females	46.95	22,723	2.17	493	493				
		Unknown .		2							
		(Totals		26,277	1.67	438	435	2	1		
St. Joseph	134	Males	57.81	13,295	1.89	251	249	2			
		Females	42.69	12,982	1.44	187	186		1		
		Totals		30,726	1.97	605	608			2	
Tuscola	90	Males	47.44	16,128	1.78	287	287				
		Females	52.56	14,600	2.18	318	316			2	
		Totals		30,341	1.77	588	530	5	8		
Van Buren	113	Males	52.97	15,377	1.85	285	280	2	3		
		Females	47.03	14,964	1.69	253	250	8			
_		Totals		41,694	1.81	547	544	3			
Washtenaw	113	Males	53.02	21,067	1.38	290	289	1			
		Females	46.98	20,627	1.25	257	255	2			
		Totals		188,966	7.43	14,046	13,841	153	48		4
Wayne	109	Males	52.17	94,492	7.71	7,325	7,225	70	30		
wayne ,	109	Females	47.83	94,474	7.11	6,715	6,614	83	18		
		Unknown .				6	2				4
		Totals	 -	10,099	2.58	256	256				
Wexford	115	Males	58.52	5,478	2.50	137	137				
		Females	46.48	4,626	2.57	119	119				

PARENT-NATIVITY.

In Table 7 are presented the statistics relative to the parentage of children born in Michigan during the year 1888. It will be seen that the number of children born of native-born parents was 44.01 per cent of the whole number, while the per cent of births of purely foreign parentage was 36.34 per cent of the whole number. The number born of mixed parentage was 8,108, or 16.56 per cent of the whole number. As compared with the percentages given in 1887, there is an increase of one per cent among the native, and nearly a corresponding decrease among the foreign. There is also a decrease of nearly one per cent among those born of mixed parentage.

The average per cent of children born of native-born parents [for the eighteen years, 1870–1887, was 44.61, which is about the same as that for the year 1888. The average per cent of children born of foreign-born parents for the same period of years was 34.83, which is 1.51 per cent less than that for the year 1888. The average per cent of those

born of mixed parentage for the eighteen years was 16.32, which does not differ materially from that for the year 1888.

When a comparison is made between native and foreign parents, it should be borne in mind that the term "Native" is less definite than the term "Foreign," as the former class includes all who were born in the United States, and therefore comprises a large number whose parents were foreign-born.

TABLE 7.—Showing, by sex, the Parent-nativity of Children born in Michigan during the year 1888, according to the returns.

			•	Total bir	ths, 1888	3.		
Nativity of		Num	ıber,			Per cent	of total.	
Parents of Children Born, 1888.	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females.	Unknown.
All nativities	48,952	25,526	23,401	25	100.00	100.00	100.00	100.00
Both parents native-born	21,542	11,168	10,365	9	44.01	48.75	44.29	36.00
Both parents foreign-born	17,791	9,327	8,456	8	36.34	36.54	36.14	82.00
Foreign father and native mother	5,136	2,695	2,440	1	10.49	10.56	10.43	4.00
Foreign mother and native father	2,972	1,567	1,408	2	6.07	6.14	5.99	8.00
Unknown mother, father native	129	58	75	1	.26	.20	.32	4.00
Unknown mother, father foreign	74	48	26		.15	.19	.11	
Unknown father, mother native	198	82	116		.41	.32	.50	ļ
Unknown father, mother foreign	93	43	50		.19	.17	.21	ļ
Both unknown	1,017	543	470	4	2.08	2.13	2.01	16.00
One or both native	29,977	15,565	14,399	13	61.23	60.98	61.58	52.00
One or both foreign	26,066	13,680	12,375	11	53.25	58.59	52.88	44.00

Table 8 shows the parent-nativity of children born in Michigan for each of the years 1886-1888, and the average for ten years 1878-1887. The excess of children born of native-born parents over those of foreign parentage in 1888 was 3,751, which was greater by 947 than the excess of the same class in 1887. Comparing the percentages of native and foreign-born parents for the year 1888 with those for the average of ten years it is seen that the proportion of children of native-born parents is less than the average, while the proportion of children of foreign-born parents is greater than the average. In both classes of mixed parentage the percentage for 1888 is less than that for the average of ten years.

According to the State census of 1884, there were, between the ages of 15 and 45 years, 597,714, or 67.25 per cent of the population native-born, and 291,016, or 32.75 per cent foreign-born.

This shows that the proportion of births among the native-born parents is less than the proportion of native-born inhabitants, while the reverse is true in regard to the foreign-born parents. In Table 9 may be seen the parent-nativity of children born in Michigan during the year 1888, not only for the entire State but also for each county. The number of births, the nativity of whose parents was returned as unknown was 1,017, of which number 24 were from Ionia; 33 from Kent; 21 from Marquette; 36 from Saginaw; 45 from St. Clair; 28 from Washtenaw, and 551 from Wayne.

TABLE 8.—Parent-nativity of Children born in Michigan for each of the years 1886–1888, and the Average for Ten Years, 1878–1887.

Nativity of Parents	18	86.	18	87.	18	88.		e for 10 878–1887.
of Children Born.	Number.	Per cent of total,	Number.	Per cent of total.	Number.	Per cent of total.	Number.	Per cent of total,
All nativities	41,095	100.00	46,226	100.00	48,952	100.00	88,704	100.00
Both native-born	17,614	42.86	19,881	43.01	21,542	44.01	17,104	44.19
Both foreign-born	15,827	87.30	17,077	36.94	17,791	36.34	13,746	35.52
Foreign father and native mother	4,463	10.86	5,058	10.94	5,136	10.49	4,381	11.82
Foreign mother and native father	2,537	6.17	3,001	6.49	2,972	6.07	2,377	6.14
One or both unknown	1,154	2.81	1,209	2.62	1,511	8.09	1,096	2.83
One or both parents native a	24,614	59.90	27,940	60.44	29,650	60.56	23,895	61.74
One or both parents foreign a	22,327	54.33	25,136	54.38	25,899	52.91	20,519	58.01
Native	20,309	49.12	23,039	49.84	24,643	50.84	19,635	50.78
Father { Foreign	19,876	48.37	22,220	48.07	23,001	46.99	18,215	47.06
(Unknown	. 910	2.21	967	2.09	1,308	2.67	8.54	2.21
(Native	22,267	54.19	25,157	54.42	26,876	54.91	21,681	56.02
Mother Foreign	17,939	43.65	20,174	43.64	20,856	42.60	16,210	41.88
Unknown	889	2.16	895	1.94	1,220	2.49	813	2.10

^{*}Excluding cases where nativity of either parent is unknown.

TABLE 9.—Exhibiting, for the State and Counties of Michigan, by Sex, the Parentnativity of Children Returned for the Year 1888. (Still-births included.)

				Nativity	of Par	ents of (Childre	n Born	n,—188	8.	
State and	100	.888.	ď	Ė	r and	or and		ther nown,		ther nown,	
Counties.	Sex.	Ę,	e-born	zn-bo	fathe ther.	nother,	Fat	ther.	Mot	her.	OWn.
7		Children born, 1888	Both native-born,	Both foreign-born.	Foreign father naslve mother,	Foreign mother native father,	Native.	Foreign,	Native.	Foreign.	Both unknown.
	Totals	48,952	21,542	17,791	5,136	2,972	129	74	198	93	1017
	Males	25,526	11,168	9,327	2,695	1,567	53	48	82	43	543
State	Females	23,401	10,365	8,456	2,440	1,403	75	26	116	50	470
	Unknown	25	9	8	1	2	1				4
	(Totals	62	6	28	10	2	*****				16
Alcona.	Males	37	3	18	4						12
	Females	25	3	10	6	2					4
	(Totals	23	2	13	4					1	3
Alger	Males	10	1	4	2						3
	Females	13	1	9	2					1	
	(Totals	767	484	139	83	35	4	3	7	1	11
Allegan	Males	389	235	77	46	22		2	1	1	5
22.5200.330,77.763	Females	378	249	62	37	13	4	1	6		6
	(Totals	409	44	276	51	35	*****	1	1		1
Alpena	Males	226	20	157	28	19		1			1
	Females	183	24	119	23	16			1		
	(Totals	202	89	68	28	16			1		
Antrim	Males	115	54	36	14	11					
	Females	87	35	32	14	5			1		
	(Totals	127	37	57	19	10	10		1		3
Arenac	Males	63	21	21	13	6					2
	Females	64	16	36	6	4			1		1
	Totals	74	15	32	5	4			1		17
Baraga	Males	36	10	14	3	2		*****			7
	Females	38	5	18	2	2			1		10
	Tôtals	362	315	13	26	7			1		
Barry	Males	192	170	5	14	3					
	Females	170	145	8	12	4			1		

TABLE 9.—Continued.—Births by Counties, Parent-nativity, and Sex.

				Nativit	y of Par	ents of (Childre	n Bor	n,—188	88.	
	15	.888	ď	é	pun	pue	Mot	her lown.	Fat	her lown.	
Counties.	Sex.	orn, 1	e-born	m-bo	ther a	other.	Fat	her,	Mot	her.	OWD.
		Children born, 1888	Both native-born,	Both foreign-born,	Foreign father and native mother,	Foreign mother native father.	Native.	Foreign.	Native.	Foreign,	Both unknown,
	(Totals	1,491	335	860	174	113		1	4	1	3
Bay	Males	788	162	475	. 85	61			2	1	2
	Females	708	178	385	89	52		1	2		1
	(Totals	102	48	32	12	8			1	1	
Benzie	Males	63	80	19	9	5					
	Females	39	18	13	3	3			1	1	
	(Totals	610	409	105	52	33	3	1	3	1	9
Berrien	Males	322	221	59	18	16	2	1	2		9
090903333	Females	288	188	46	34	17	1	1.2	1	1	
	(Totals	851	800	22	16	8	1		1	1	2
Branch	Males	176	150	13	10	1				1	1
	Females	175	150	9	6	7	1		1		1
W 1	(Totals	651	476	60	60	39	5	2	3	1	5
Calhoun	Males	334	239	36	31	22	1	1	1	1	2
	Females	317	237	24	29	17	4	1	2		5
	(Totals	338	294	12	13	11			5		2
Cass	Males	190	162	9	5	7			4		1
	Females	148	132	3	8	4			1		
	(Totals	143	62	41	20	18					2
Charlevoix	Males	72	38	18	7	8					,
	Females	71	24	23	13	10		,			,
	(Totals	317	77	157	52	24		1	1	2	
Cheboygan	Males	159	34	81	25	15			1	1	1
200	Females	158	43	76	27	9		1		1	,
	(Totals	178	87	110	18	8	1		1	2	,
Chippewa	Males	92	22	55	9	5	1				
77-9-14-T7-11-11-1	Females	86	15	55	9	3			1	2	1
	(Totals	153	72	37	25	13			2		4
Clare	Males	68	30	19	11	6					3
A STATE OF THE STA	Females	85	42	18	14	7			2		
	(Totals	458	827	46	58.	19			4		1
Clinton	Males	220	153	22	26	10			3		
	Females	238	174	24	27	9			1		

TABLE 9.—Continued.—Births by Counties, Parent-nativity, and Sex.

			1-1	Nativit	y of Par	ents of (Childre	en Bor	n,—188	8.	
Counties.	Sex.	1888.	ę.	orn.	and .	r and	Mo	ther nown,	Fat	her lown,	
Countaies.	Sex.	orn,	e-bor	gn-bc	ther	other,	Fat	her.	Mot	her.	OWn.
		Children born, 1888	Both native-born,	Both foreign-born,	Foreign father and native mother,	Foreign mother native father.	Native.	Foreign.	Native.	Foreign.	Both unknown,
	(Totals	16	10	2	3	1					
Crawford	Males	9	7	1	1						
	Females	7	8	1	2	1					
	(Totals	378	76	218	59	19	3	1			2
Delta	Males	200	43	110	31	12	2	1			1
	Females	178	33	108	28	7	1				1
	(Totals	468	405	11	25	10	14		3		
	Males	225	198	6	12	5	4				
Eaton	Females	242	207	5	13	5	9		8		
	Unknown	1					1				
	(Totals	121	71	32	9	9			3		5
Emmet	Males	64	38	18	4	2					2
	Females	57	33	14	5	1			3		1
	(Totals	541	356	57	61	64			1		2
	Males	265	169	36	27	31			1		1
Genesee	Females	275	187	21	34	32					1
	Unknown	1				1					
	(Totals	53	17	16	11	8				1	
Gladwin	Males	30	8	11	7	8	[3,2]			1	
	Females	23	9	5	4	5			7		
	(Totals	251	34	158	24	9	2	8	2	1	15
Gogebic	Males	146	21	93	13	4	1	3	1		10
	Females	105	13	65	11	5	1	5	1	1	1
	(Totals	247	133	64	24	19			1	2	4
Grand Traverse	Males	134	78	28	18	12	00000			1	2
orana graverse	Females	113	60	36	6	7			1	1	2
	(Totals	473	360	25	62	20	1				
	Males	240	181	14	27	14	1				8
Gratiot	Females	231	178	10	35	6			1		2
	Unknown.	201	1	1	90	0				1100	1
	(Totals	338	301	9	16	8	*****	1	1		5
Hillsdale	Males	169	149	4	9	6		1	1	******	1
minsdale				10.3		100	******	1			
	Females	169	152	5	7	2		*****	1		2

TABLE 9.—Continued.—Births by Counties, Parent-nativity, and Sex.

				Nativit	y of Par	ents of	Childr	en Bor	n,—18	88.	
Counties.	Sex.	1888.	é.	orn,	pur .	r and		ther nown,	Pat Unki	ther nown.	
Counties.	Doa.	orn,	e-boi	d-	ther	othe her.	Fat	her.	Mot	ther.	OWD
		Children born, 1888.	Both native-born,	Both foreign-born,	Foreign father and native mother.	Foreign mother native father.	Native.	Foreign.	Native.	Foreign,	Both unknown,
	Totals	1,022	140	719	107	31		3			22
Houghton	Males	554	84	387	49	17		3			14
	Females	468	56	332	58	14					8
	Totals	671	108	413	93	58			1	2	1
Huron	Males	345	50	218	52	23			1	1	
	Females	326	58	195	41	30				1	1
	Totals	491	335	70	35	34	7	2	1	2	5
Ingham	Males	245	169	33	21	14	1	2	1	2	2
	Females	246	166	37	14	20	6				3
	(Totals	440	305	44	41	23	1		2		24
Ionia	Males	221	151	22	23	13	1		1		10
200	Females	219	154	22	18	10			1		14
	(Totals	300	40	198	30	31			1		
Iosco	Males	151	21	97	17	15			1		
STATE OF SELECTION	Females	149	19	101	13	16					
	(Totals	97	13	63	9	1			1		10
Iron	Males	43	5	32	4						2
	Females	54	8	31	5	1			1		8
	(Totals	432	227	108	58	38			2		6
Isabella	Males	224	120	49	25	24			1		5
CC. No. 12 and C T and C Co.	Females	208	107	57	28	14			1		1
	(Totals	579	379	102	47	29	5		11	1	5
Jackson	Males	308	208	49	21	16	8		7	1	3
The state of the state of	Females	271	171	53	26	13	2		4		2
	(Totals	679	407	174	50	87	1	1	3		6
Kalamazoo	Males	342	211	85	27	15	1		1		2
	Females	337	196	89	23	22		1	2		4
	(Totals	102	63	15	11	13					
Kalkaska	Males	44	28	8	6	7					
	Females	58	40	7	5	6				1.3	
	(Totals	2,079	836	845	205	131	9	4	15	1	33
Kent	Males	1,083	443	423	113	71	5	3	5	1	19
Premiorination	Females	996	393	422	92	60	4	1	10		14

TABLE 9.—Continued.—Births by Counties, Parent-nativity and Sex.

				Nativit	y of Par	ents of	Childre	n Bor	n,—18	88.	
Counties,	Sex.	Children born, 1888.	born.	a-born,	ather and her,	n mother and father,	Unk	other nown,	Unk	ther nown,	wn,
		og u	tive	gie	moth	fath	-	1 ,	-	1 .	kno
		Childre	Both native-born,	Both foreign-born,	Foreign father native mother,	Foreign native fa	Native.	Foreign	Native.	Foreign.	Both unknown.
	Totals	118	13	79	23	1		1	1		
Keweenaw	Males	73	10	48	12	1		1	1		
	Females	45	8	-× 31	11						
	(Totals	90	39	28	9	12		1		1	
Lake	Males	35	14	10	4	5		*1		1	-
	Females	55	25	18	5	7					
	Totals	481	224	120	79	53	1		1		
	Males	261	115	64	45	35	1		1		
Lapeer	Females	217	108	56	83	17					2
	Unknown	3	1	13774.2.4	1	1					
	Totals	232	80	93	37	13	1		4	2	2
Leelanaw	Males	114	45	43	19	4	*****			2	1
	Females	118	35	50	18	9	1		4	2222	1
	Totals	632	480	70	49	22	1	1	2		7
Lenawee	Males	320	249	33	22	12					4
	Females	312	231	37	27	10	1	1	2		9
	(Totals	304	233	27	24	19			1		
Livingston	Males	151	112	17	10	11		1	1		
	Females	158	121	10	14	8					
	Totals	19	5	13	1						
Luce	Males	10	4	5	1						
	Females	9	1	8							
- 1	(Totals	120	46	41	19	5	1		2		6
C	Males	67	25	28	7	4	1		2		5
Mackinac	Females	52	21	17	12	1					1
	Unknown	1		1		مينين					
	(Totals	687	346	175	85	76			3	2	
Macomb	Males	352	174	91	49	35			2	1	
	Females	885	172	84	36	41			1	1	
	(Totals	896	121	477	57	33	2		1		5
Manistee	Males	895	64	277	31	17	1		1	-	4
	Females	301	57	200	26	16	1				1
	Totals	10	6	2	1	1					
Manitou	Males	5	3	2							
	Females	5	8		1	1					

TABLE 9.—Continued.—Births by Counties, Parent-nativity, and Sex.

				Nativit	y of Par	ents of	Childre	en Bor	n,—188	8.	
Counties.	Sex.	1888.	ė.	orn,	and	r and	Mo Unkn	ther lown.	Fat	her own,	
Countaios	DOM:	orn,	o-po	q-Es	ther	othe ther,	Fat	ber.	Mot	her.	IOWD
		Children born, 1888	Both native-born,	Both foreign-born,	Foreign father and native mother,	Foreign mother and native father,	Native.	Foreign.	Native.	Foreign.	Both unknown.
	Totals	1,049	100	844	55	29					21
Marquette	Males	544	52	437	27	17					11
	Females	505	48	407	28	12					10
	(Totals	334	120	142	36	25		8	1	3	4
Mason	Males	169	59	77	17	10		3	1		2
	Females	165	61	65	19	15				8	2
- LI	(Totals	375	197	99	89	38	1	T. C.	1		
Mecosta	Males	177	90	49	17	20	-50		1		
	Females	198	107	50	22	18	1		2001	0.37	
	(Totals	841	137	568	81	32	1	1	4		17
Menominee	Males	437	76	297	40	15		1	1000		8
	Females	404	61	271	41	17	1		4		9
	(Totals	260	113	81	29	33	1		3		
Midland	Males	151	67	42	19	19	1		3		-
a manu.	Females	109	46	39	10	14					-
	(Totals	86	19	49	13	3		40000	1		1
Missaukee	Males	49	14	27	7			*****	1		1
MISSIUKO	775	100	51	22				******	1		-
	(Females	87	5		6	3					1
	Totals	670	490	55	76	36	3	1	3	1	1
Monroe	Males	341	255	24	37	20	1	1			1
	Females	327	285	29	39	16	2	*****	3	1	2
	(Unknown	2		2			*****				
ALCOTO NO.	Totals	598	349	122	68	42	4	1	5	2	1
Montcalm	Males	315	181	53	45	25	3	1	3	1	1
	Females	283	168	69	23	17	1	*****	2	1	2
	Totals	26	4	14	6	2					
Montmorency	Males	12	1	9	1	1					-12-
	Females	14	8	5	5	1					
	Totals	1,139	314	629	121	63	2	2	2	3	1
Muskegon	Males	617	164	852	65	31		1	1	2	1
	Females	521	150	277	56	32	2	1	1	1	1
	Unknown	1									1
	Totals	329	202	69	31	13	1		4		. 5
Newaygo	Males	161	91	36	19	8			2	*****	
	Females	168	111	33	12	5	1		2		1.4

TABLE 9.—Continued.—Births by Counties, Parent-nativity and Sex.

				Nativit	y of Pare	ents of (Childre	en Bor	n,—18	88.	
Counties.	Sex,	n, 1888.	orn.	born,	ther and er,	her and r.	Unkı	ther nown,	Unkı	ther nown,	j,
		por	ve-b	Ė	fai	mo	Fat	her.	Mot	her.	nou
		Children born, 1888.	Both native-born.	Both foreign-born.	Foreign father native mother,	Foreign mother native father.	Native.	Foreign.	Native.	Foreign,	Both unknown,
	Totals	489	347	51	35	41	11	1	2	******	1
Oakland	Males	262	191	24	19	23	5				
	Females	227	156	27	16	18	6	1	2		1
	Totals	282	164	58	28	28	1		1		2
Oceana	Males	141	81	28	14	17					1
	Females	141	83	30	14	11	1	571	1	2.0.1	1
	(Totals	117	40	58	13	5			LUS.		1
Ogemaw	Males	68	25	34	5	3			1		1
9	Females	49	15	24	8	2	1				
	(Totals	54	23	7	7	1	6	9			1
	Males	34	15	3	5		2	9			1
Ontonagon	Females	16	4	4	2	1	4	, ,			1
	Unknown	4			-	1		*****			,
	(Totals	1	4	100	07	04		*****			
	4	341	169	109	37	21		*****	2	*****	8
Osceola	Males	183	87	58	21	12	*****	*****	2		8
	Females	158	82	51	16	9	*****				
_	Totals	8	5	3			*****				
Oscoda	Males	4	4				*****				
	Females	4	1	3							
	Totals	64	25	30	7	2			*****		
Oteego	Males	34	16	14	3	1					
	Females	30	9	16	4	1					
•	Totals	919	447	299	96	67	4	2	8		1
Ottawa	Males	444	220	138	51	30	1	1	2		1
	Females	475	227	161	45	87	3	1	1		
	Totals	127	6	110	4	2				1	4
	Males	70	4	59	3	2					2
Presque Isle	Females	55	2	51	1					1	
,	Unknown	2									2
	(Totals	33	9	19	4	1				100	
Roscommon	Males	17	5	10	1	1					
	Females	16	4	9	3						
	(Totals	2,156	640	928	372	158	2	3	12	5	36
	Males	1,168	348	492	206	85	1	2	6	4	24
Saginaw	Females	987	292	436	166	78	1	1	6	1	11
	Unknown	1	202	100	100	10					1

TABLE 9.—Continued.—Births by Counties, Parent-nativity and Sex.

				Nativit	y of Pare	ents of (Childre	n Bor	n,—188	38.	
7.70		.888.		j.	and	r and		ther nown,		ther nown.	
Counties.	Sex.	om, 1	-borr	n-bor	father ther.	mother ther.	Fat	her.	Mo	ther.	JWI.
		Children born, 1888	Both native-born,	Both foreign-born	Foreign fathe native mother.	Foreign moth native father,	Native.	Foreign.	Native.	Foreign.	Both unknown,
		-5	Bo	Bo	Fo	Fo	Na	Fo	Na	Fo	Bo
	Totals	719	116	376	161	56	******	2	1	4	0
Sanilae	Males	360	63	182	81	28		1	1	2	
	Females	859	58	194	80	28	*****	1		2	
+	Totals	102	27	54	14	5					8
	Males	56	15	31	6	3					1.6
Schooleraft	Females	45	11	23	8	2					
	Unknown	1	1								
	(Totals	369	228	68	41	22	8	1	2	1	
Shiawassee	Males	203	124	35	26	10	2	1	1	1	
	Females	166	104	33	15	12	1		1		
	Totals	1,050	387	311	158	121	11	11	5	1	4
St. Clair	Males	557	212	149	98	57	6	5	2	1	2
	Females	498	175	162	60	64	5	6	3		1
1	(Totals	438	326	56	25	19	2		5		1
St. Joseph	Males	251	184	33	17	11	1		3		
220,021,000	Females	187	142	28	8	8	1		2		
	Totals	605	285	130	92	79	5		2	2	1
Tuscola	Males	287	133	64	58	31	2				1
	Females	318	152	66	39	48	3		2	2	
	(Totals	538	459	21	30	20	1		5		
Van Buren	Males	285	241	14	18	10			1		1.3
	Females	253	218	7	12	10	1		4		
	(Totals	547	297	113	77	29			2	1	25
Washtenaw	Males	290	153	67	42	15			1	1	1
100 30000 313103	Females	257	144	46	35	14			1	11100	1
	(Totals	14,046	5,788	5,656	1,277	744	6	4	32	43	55
	Males	7,325	2,993	2,960	654	407	2	2	9	15	283
Wayne	Females	6,715	2,738	2,692	628	337	4	2	23	28	268
	Unknown	6	2	4	127						
	(Totals	256	126	88	28	15	1	1			
Wexford.	Males	137	62	54	11	8			7000		1
	Females	119	64	34	12	7	1	1			

TWIN CHILDREN, 1888.

According to the returns in 1888, there were 1,194 children born of 592 mothers. Of this number 1,166 were twins; twenty-four were triplets, and four were reported as quadruplets. There were more twin children returned for the year 1888 than for any previous year in the history of registration, corresponding in this respect to the increased number of births. In 197 cases of the 583 pairs of twins both children were males; in 163 cases both were females; and in 223 cases there was one child of each sex, making 617 males and 549 females. The proportion of males to females was 112 males to each 100 females, which was a smaller proportion than was returned in 1887, but larger than that for all children born. The average proportion of males for the ten years, 1878–1887, was 101 males to 100 females, which is also a smaller proportion of males than is found among all children born.

Table 10 shows, by months, the number of pairs of twin and the number of twin children for the year 1888. The month of April stands at the head of the list with the largest number of twin births, and the month of September at the foot with the smallest number.

TABLE 10.—Exhibiting, by Sex, the Number of Pairs of Twins and Twin Children Returned for the Year 1888.

		No.	of Twi	in Chile 888.	dren,	N	o. of P	airs of	Twin	s, 1888	
	Year and Months, 1888.	Totals,	Males,	Females,	Males to 100 fe- males.	Totals,	Males.	Females.	One of each sex.	Males to 100, one of each sex.	Males to 100 fe- males.
Year 1	888	1,166	a 617	ь 549	112	583	197	163	223	88	121
-44	(April	134	81	58	152	67	25	11	31	80	227
pe .	December	120	64	56	114	60	28	19	18	127	121
an t	May	110	55	55	100	55	18	18	19	94	100
More than the Average No. of Twins.	July	106	57	49	116	58	21	17	15	140	128
Mo	February	104	58	51	104	52	13	12	27	48	108
	ge	98	51	47	109	49	16	14	19	84	114
·	June	96	47	49	95	48	13	14	21	61	98
8 P	October	92	35	57	61	46	10	21	15	67	48
Vera 18.	March	90	55	35	157	45	18	8	19	95	225
Iwla	November	90	50	40	125	45	16	11	18	88	143
of of	August	82	46	36	127	41	15	10	16	93	150
Less than the Average No. of Twins.	January	80	41	89	105	40	15	14	11	136	107
3	September	62	33	29	113	31	10	8	13	77	125

a Includes 46 still-born, 1 black, 2 mulatto, and 2 indian. b Includes 31 still-born, 1 black, 6 indian, and 2 illegitimate.

The facts concerning the nativity of the parents of twins will be found in Table 11. The most noteworthy feature of the table is the increased proportion of twins whose parents were foreign-born, the percentage for 1888 being larger than for any year of the previons ten, and 6.33 per cent larger than the average for ten years. Comparing the evidence in this table with that given in Table 7, it will be observed that the proportion of twins born of foreign parents was greater than that for all children born, while the reverse is true in regard to the native-born. All of this tends to show that there is a larger twin birth-rate among the foreign-born parents than among the native, and as the statistics of former years also bear the same testimony, it seems to be quite conclusive.

TABLE 11.—Parent-nativity of Twins Returned in Michigan for 1888.

			P	airs o	f Twins,	1888.		
Nativity of Parents of Twins, 1888.		Nun	nber.		Per Ct. to To	of each P otal of al	arent-N l Nativi	ativity ties.
Nativity of Parents of Twins, 1999.	Totals.	Males.	Females.	One of each.	Totals.	Males.	Females.	One of each,
All nativities	583	197	163	223	100.00	100.00	100,00	100,00
Both native-born.	238	79	68	91	40.83	40.10	41.72	40.81
Both foreign-born	257	87	73	97	44.08	44.16	44.79	43.50
Foreign father and native mother	48	21	12	15	8.23	10.66	7.36	6.72
Foreign mother and native father	30	10	8	12	5,15	5.08	4.91	5,38
Unknown mother, father native				1				
Unknown mother, father foreign	1			1	.17			.45
Unknown father, mother foreign.	1		1		.17		.61	
Both unknown	8		1	7	1.37		.61	3.14
One or both native	316	110	88	118	54.20	55.84	58.99	53.36
One or both foreign.	337	118	94	125	57.80	59.90	57.67	56.05

Table 12 shows the proportion of twin births, by nativity and color of mothers, for 'each of the years 1886, 1887, 1888, and the average for the ten years 1878–1887. According to the facts here presented the largest proportion of twins was among the foreign-born mothers, being greater than that for the mothers of all nativities. This is true, not only for the year 1888, but also for the ten-year average. As regards the color of mothers of twins the black and mulatto have the largest proportion for each year and the average except the year 1888. This table bears out the evidence given in table 11 concerning the nativity of mothers of twins.

TABLE 12.—By Nativity and Color of Mothers, the Number and Proportion of Twin Births returned for the Years 1886–1888, and the Average for Ten Years, 1878–1887.

		1886.			1887.			1888.		Averag 1	e for 10 878–1887	Years
Nativity and Color of Mothers of Twins, 1886–1888.	Number of pairs of twins.	Whole No. of mothers including those of twins.	Per cent of births of twins to all mothers.	Number of pairs of twins.	Whole No. of mothers including those of twins.	Per cent of births of twins to all mothers.	Number of pairs of twins.	Whole No. of mothers including those of twins,	Per cent of births of twins to all mothers,	Number of pairs of twins.	Whole No. of mothers including those of twins.	Per cent of births of twins to all mothers.
Mothers of all colors and all nativities All native-born moth- ers. All foreign-born moth- ers unknown nativities	501 272 221 8	40,582 21,989 17,712 881	1.23 1.24 1.24 .91	528 271 245 12	45,688 24,880 19,925 883	1.16 1.09 1.23 1.36	583 286 288 9	48,350 26,582 20,557 1,211	1.20 1.07 1.40 .74	442 239 194 9	38,251 21,437 16,010 804	1.16 1.11 1.21 1.12
White	494	40,262	1.23	513	45,127	1.10	577	47,867	1.20	434	37,851	1.15
Black	1	86	1.16	10	254	3.94	1	234	.43	3	134	2.24
Mulatto	5	108	4.63	1	67	1.49	1	106	.94	3	92	2.26
Indian	1	112	.89	3	113	2.65	4	126	3.17	2	125	1.60
Unknown		14		1	127	.79		17		*****	49	
Black and mulatto	6	194	3.09	11	321	3.43	2	340	.58	6	226	2.65

Table 13 presents certain facts concerning the births of triplet children in 1888. There were eight such cases and one case of quadruplets. The set of quadruplets was returned from Allegan county and is the second time in the history of registration that more than three children were born at a single birth. The other case was in the year 1880 and from Huron county. As regards the sex of those in table 13, there were seventeen males and eleven females. It also appears from the table that the foreign-born parents outnumbered the native, there being six foreign fathers to three native fathers, and five foreign mothers to four native mothers.

TABLE 13.—Exhibiting certain details concerning Triplet Children returned for the the year 1888.

	Т	riplet chi	ldren,	1888.		Parer	nts of triplets,	1888.
Counties.	blrth,			Sex.			5	5
Countries.	Month of 1 1888.	Color,	Males.	Females.	Unknown.	Buthplace father.	Birthplace mother.	Occupation (father.
Allegan	June	White	• 3	1		Austria	Austria	Farmer.
Clare	Jan	White	ь 2	1		Canada	Canada	Jeweler.
Gratiot	Feb	White	8			Pennsylvania,	Pennsylvania.	Farmer.
Gratiot.	Feb	White	c 1	2		New York	New York	Farmer.
Manistee	July	White	d 3	ļ		Canada	Canada	Teamster.
Muskegon	June	White	2	1		Finland	Finland	Laborer.
Way ne	Jan	White	e 2	1		Canada	Michigan	Sailor.
Wayne	March	White		8		Michigan	Michigan	Saloonist.
Wayne	Oct	White	1.	2		Ontario	Ireland	Butcher.

Reported quadruplets.
 One female still-born.

TABLE 14.—Exhibiting the Number of Pairs of Twins and Cases of Triplets returned in Michigan for the 14 Years, 1875–1888, and the average for these years.

Years.	Pairs of Twins,	Cases of Triplets.	No. of Births to one Pair of Twins.	No. of Births to one Case of Triplets.
1875	370	1	86	31,958
1876	428	8	80	4,279
1877	367		91	33,395
1878	427	8	82	11,721
1879	402	2	85	17,061
1880	858	5	99	7,065
1881	872	5	98	6,950
1882	480	9	86	4,114
1688	466	9	88	4,534
1884	450	4	90	10,102
1885	481	7	88	6,017
1886	501	6	82	6,849
1887	528	5	88	9,245
1888	583	8	84	6,119
Average	440	5	87	11,396

<sup>One male and two females still-born.
d Three males still-born.
One male and one female still-born.</sup>

In table 14 may be seen the number of pairs of twins and sets of triplets returned for each of the years 1875–1888, also the average for these years. It appears from the facts here presented that the proportion of twin births to single births does not vary materially in the course of a series of years, there being about 87 single births to each pair of twins.

Table 15 shows the statistics of plural births during the past fourteen years, classified with reference to the nativity of the parents. The percentage of those born of native parentage was less than that for any year since 1885, and also less than that of the average for fourteen years. The percentage of those born of foreign parents was greater than that of any previous year of the table, and was 5.99 per cent greater than the average.

TABLE 15.—Exhibiting the Parent-nativity of Plural Births returned in Michigan for the Fourteen Years, 1875-1888.

		Native	-born.	Foreign	n-born.	Miz	æd.	Unkn	own.
Years.	Totals.	Numbers.	Per cent.						
1875	748	271	36.47	318	42.80	124	16.69	30	4.04
1876	880	391	44.48	322	36.59	148	16.25	24	2.73
1877	734	334	45.51	252	34.33	122	16.62	26	3.54
1878	863	402	46.58	291	83.72	142	16.45	28	3.25
1879	810	874	46.17	236	29.14	188	28.21	12	1.48
1880	731	341	46.65	276	87.75	104	14.23	10	1.37
1881	759	855	46.77	270	85.57	124	16.34	- 10	1.32
1882	887	350	39.46	358	40.36	153	17.25	26	2.93
1883	959	417	43.48	364	37.96	150	15.64	28	2.92
1884	912	360	39.47	396	43.42	144	15.79	12	1.32
1885	983	884	39.06	414	42.12	155	15.77	80	3.05
1886	1,020	419	41.08	407	39.90	176	17.26	18	1.76
1887	1,071	448	41.83	423	39.49	168	15.69	82	2.99
1888	1,194	485	40.62	580	44.39	159	13.32	20	1.67
Average	925	381	42.68	847	88.40	147	16.47	22	2.45

STILL-BIRTHS, 1888.

The number of still-births reported for the year 1888 was 1,358, which was the largest number ever returned for a single year. It was 461 more than was reported in 1887; 449 more than in 1886; 350 more than in 1885, and 520 more than for the ten-year average. Table 16 shows the proportion of still-births to all births and the proportion of the mothers of still-born children to all mothers for the years 1885–1888, and the average for ten years, 1878–1887. It will be noticed that the per cents for the average were not as great as those for the year 1888.

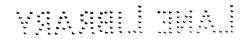
TABLE 16.—The relation of Still-births to all Births and the relation of Mothers of Still-born Children to all Mothers returned for the years 1885–1888, and the Average for ten years, 1878–1887.

		Total bi	rths and Sti	ll-births.	•
Children and Mothers.	1885.	1886.	1887.	1888.	Av. for 10 Years, 1878–1887.
All children born	42,119	41,095	46,226	48,952	88,704
Still-born children	1,008	909	897	1,858	888
Per cent of still-born to total	2.39	2.21	1.94	2.77	2.17
All mothers	41,624	40,582	45,688	48,850	38,251
Mothers of still-born children	978	. 880	869	1,322	815
Per cent of mothers of still-born children to all mothers	2.35	2.17	1.90	2.73	2.13

The facts concerning the nativity and color of the mothers of still-born children may be learned in Table 17. The percentage of native-born mothers is again the lowest, not only for each year of the table, but also for the ten-year average. The black and mulatto mothers continue to have the highest per cent, while the indian mothers have the lowest.

TABLE 17.—By Nativity and Color, the Number and Proportion of Mothers having Still-births, for the Years 1886–1888, and the average for Ten Years, 1878–1887.

		1886,		I.T.	1887.			1888,			ge for 10 1878–188	
Nativity and Color of Mothers.	Mothers having still- births,	Whole No. of mothers, including those of still-births.	Per cent of mothers of still-births to all moth- ers.	Mothers having still- births,	Whole No. of mothers, including those of still- births.	Per cent of mothers of still-births to all moth- ers.	Mothers having still- births,	Whole No, of mothers, including those of still-births.	Per cent of mothers of still-births to all moth- ers.	Mothers having still- births.	Whole No. of mothers, including those of still- births.	Per cent of mothers of still-births to all moth- ers.
Mothers of all colors and all nativities	880	40,582	2.17	869	45,688	1,90	1,322	48,350	2.73	815	38,251	2.13
All native-born	395	21,989	1.80	408	24,880	1.64	604	26,582	2.27	379	21,437	1.77
All foreign-born	340	17,712	1,92	367	19,925	1.84	539	20,557	2.62	324	16,010	2.02
Mothers of un- known nativi- ties	145	881	16.46	94	883	10.65	179	1,211	14.78	112	804	13.93
White	861	40,262	2.14	849	45,127	1.88	1,288	47,867	2.69	794	37,851	2.10
Black	4	86	4.65	12	254	4.72	17	234	7.26	7	134	5.22
Mulatto.	5	108	4.63		67		6	106	5.66	3	92	3.26
Indian	******	112		4	113	3.54	3	126	2.38	1	125	.80
Unknown	10	14	71.43	4	127	3.15	8	17	47.06	10	49	20.40
Black and mu-	9	194	4.64	12	321	3.74	23	840	6.76	10	226	4.42



In Table 18 is presented the nativity of both parents of still-born children for the year 1888. It is seen that thirty-eight per cent of these births fell to native-born parents; thirty-four per cent were the offspring of foreign-born parents, and thirteen per cent occurred to parents, one of whom was a foreign-born, while the other was native-born.

TABLE 18.—Parent-nativity of Still-born Children returned for the year 1888.

			Still	-born Ch	ildren,-	-1888.		
Nativity of Parents of Still-born Children, 1888.		Num	iber,			nt of each rotal of a		
	Totals.	Males,	Females.	Unknown.	Totals.	Males.	Females.	Unknown.
All nativities	1,358	809	534	15	100.00	100.00	100.00	100.00
Both native-born	516	322	190	4	38.00	39.80	85.58	26.67
Both foreign-born	467	280	183	4	34.39	34.61	34.27	26.67
Foreign father and native mother	96	54	41	1	7.07	6.68	7.68	6.67
Foreign mother and native father	83	51	30	2	6.11	6.30	5.62	13.88
Unknown mother, father native	3		2	1	.22		.37	6.66
Unknown mother, father foreign	5	4	1		.37	.50	.19	
Unknown father, mother native	8	1	7		.59	.12	1.31	
Unknown father, mother foreign	6	3	8		.44	.37	.58	
Both unknown	174	94	77	3	12.81	11.62	14.42	20.00
One or both native	706	428	270	8	51.99	52.90	50.56	58.33
One or both foreign	657	392	258	7	48.38	48.45	48.31	46.67

TABLE 19.—Exhibiting by Sex, the Parent-nativity, and by Sex and Months, the Number of Still-births returned in Michigan for the Year 1888.

	<u> </u>	'UAMO	Both unkn	174	35	11	••
~*	her,	her.	Poreign,	9	00	65	
, I I I	Father	Moti	,evueN	000	7	7	1
-birth	her own,	ner.	Foreign,	10	-	1	
	Mother	Father	Jattve,	•		21	-
arents o	pus .	io the r. ther.	Forelgn m	88	22	8	63
Nativity of Farents of Still-births,—1988.		ather,	Toreign T	88	ž	17	-
Nati			Foreign.	467	88	183	7
			Astive,	516	322	130	4
	1		Unknown.	10	63	-	23
			December.	157	101	32	1
			До четрег .	119	67	21	-
			October,	108	28	49	*****
			September	66	67	31	-
ě.			'psn3ny	112	20	42	-
Months, 1888.			Anja.	121	77	43	1
Mon			.eung	112	65	47	-
			May.	120	76	43	-
			April.	100	52	46	64
			March.	104	63	11	-
			February.	88	18	35	83
			January.	108	22	20	62
	3	1888.		1,358	808	534	12
		-			9		70
	Sex of	Still-births, 1888.		Totals	Males	Females	Unknown

Includes 12 pairs and 6 half-pairs male twins; 7 pairs and 2 half-pairs female twins; 12 pairs and 4 half-pairs male and 3 half-pairs female twins of one of each sex. Includes 782 white, 11 black, 5 mulatto, 1 indian, and 10 illegitimate. Includes 524 white, 6 black, 1 mulatto, 3 indian, and 9 illegitimate. Includes 74 white and 8 color unknown.

The returns of births for the year 1888 again exemplify the universal rule of an excess of males among children born alive and among the still-born children. It is also the usual observation that among illegitimate births those of females outnumber those of males. The ratio among still-births for 1888 was 151 males to 100 females, being greater than that for the ten-year average. Among illegitimates there were 98 males to 100 females, and for the ten-year average the sexes were equal.

TABLE 20.—Exhibiting the Proportion of Males to Females among Children born alive, Still-births and Illegitimates.

		1887.	1888.	Average for 10 Years, 1878–1887.
	(Males	23,523	24,717	19,588
Born alive	Females	21,771	22,867	18,250
	Unknown	35	10	23
Males to 100 females		108	108	107
	Males	503	809	475
Still-born	{ Females	359	584	325
•	Unknown	85	15	39
Males to 100 females		140	151	146
	(Males	196	293	158
Illegitimate	{ Females	224	298	158
	Unknown	. 2		2
Males to 100 females		88	98	100

ILLEGITIMATE CHILDREN, 1888.

The number of illegitimate births, of which there was any record in 1888, was 591, which is the largest number returned for any year since the beginning of registration. The increase in the number in the last four years is noteworthy, and indicated that the record of these cases is more complete than formerly. In 1888, these births represent a ratio of 12.07 to each one thousand of the whole number of births in the State. Of the whole number reported, Wayne county, or the city of Detroit, contributed 407, more than two-thirds, and the ratio of illegimates to the total births in the county was 28.99 to one thousand.

The statistics presented in Table 22 show the nativity and color of mothers of illegitimate children for the years 1886, 1887, 1888, and the average for ten years, 1878–1887. The proportion of native-born mothers was lower in 1888, than the ten-year average and also lower than in 1887 or 1886. As regards color, the largest proportion of mothers of illegitimates to all mothers appears for the black and indian, and the smallest for the white.

From the showing in Table 25, it would be natural to conclude that the native-born women of Michigan were more immoral than the foreign-born. But upon a closer examination of the facts presented, a different conclusion is reached. Making a comparison of rates based upon the data of the population in the two classes, it is found that there were 291,906 native-born females in Michigan between the ages of 15 and 45 to 125,373 foreign-born females. Calculating the birth-rates to 10,000 mothers of each class, there were, in 1888, 5.10 for the native-born to 5.74 for the foreign-born. When

the fact is taken into consideration that nearly all the indians and those of African descent are included among the native-born, among whom the illegitimate birth-rate is shown in Table 26 to be greater than among other races, the showing becomes more favorable for the native-born whites.

The very large proportion among mothers of unknown nativities and unknown color, shows how incomplete are the records of these births.

TABLE 21.—The Relation of Illegitimate Children to all Children born for the years 1885-1888, and the Average for 10 years, 1878-1887.

		Total Birt	hs and Illeg	itimates.	
Children and mothers.	1885.	1886.	1887.	1888.	Average for 10 Years, 1878-1887.
All children born	42,119	41,095	46,226	48,952	88,704
Illegitimate children	248	300	422	591	308
Per cent of illegitimates to total	.59	.78	.91	1.20	.79
All mothers	41,624	40,582	45,688	48,350	88,251
Mothers of illegitimate children	247	297	418	590	805
Per cent of mothers of illegitimates to all mothers.	.59	.78	.91	1.22	.79

TABLE 22.—By Nativity and Color, the Number and Proportion of Mothers of Illegitimates returned for the years 1886-1888, and the average for ten years, 1878-1887.

		1886.			1887.			1888.		Averag	ge for 10 878-1887.	years,
Nativity and color of mothers.	Mo.hers having illegiti- mates.	Whole number of mothers, including those of illegitimates.	Per cent of mothers of llegitimates to all mothers.	Mothers having Illegiti- mates.	Whole number of mothers, including those of illegitimates.	Per cent of mothers of illegitimates to all mothers.	Mothers having Illegiti- mates.	Whole number of mothers, including those of illegitimates.	Per cent of mothers of illegitimates to all mothers.	Mothers having Illegiti- mates.	Whole number of mothers, including those of illegitimates.	Per cent of mothers of illegitimates to a 11 mothers.
Mothers of all colors and all nativities. All native-born moth- ers. All foreign-born moth- ers. Mothers of unknown nativities.	297 140 45 112	40,582 21,989 17,712 881		418 150 70 198	45,688 24,880 19,925 883	.91 .60 .35 22.42	590 149 71 370	48,350 26,582 20,557 1,211	.56	137 72	38,251 21,437 16,010 804	.79 .63 .44
White	279 8	40,262	.69 3.49	319 10	45,127 254	.71 3,98	571 12	47,867 234	1.19	-	37,851 134	.73 4.47
MulattoIndian	6	108 112	5.56 6.25	7 8	67	10.45 7.08	2 5	106 126	1		92 125	4.34 5.60
Unknown	2	14	4.00	74	127	58.27		17	3.90	8	49	16.32
Black and mulatto	9	194	4.64	17	321	5.80	14	840	4.11	10	226	4.42

TABLE 23.—Exhibiting by Sex. the Number by Months, and the Nativity of Parents of Illegitimates returned for the Year 1888.

						-	Months, 1888.	hs, 1	888						Nat	vity	of l	foth es, 18	Nativity of Mothers of Illegitimates, 1888.			ž	Nativity of Fathers (Illegitimates, 1888.	y of	Fat	1888	of.
												-	-		Native.		_	Foreign.	ė,			Nat	Native.	_	Foreign.	ign.	-
Sex of Illegitimates, 1888.	Year, 1888.	January.	February,	Магећ,	April.	May,	June.	July.	August.	September,	October,	November,	December,	Totals,	Born in Michigan,	Born in other states.	Totals.	Born in Canada,	Born in other coun-	Unknown.	Totals,	Born in Michigan,	Born in other states.	Totals,	Born in Canada,	Born in other coun-	Unknown,
Totals.	591	97	62	13	82	12	22	22	25	40	47	35	30	149	9 117	7 32	72	21	15	370	97 0	6 40	-	6 17		11 9	1 528
Males	293	18	22	30	63	32	83	75	8	54	68	18	18	73	9 80	13	55	97	12	189	65 69	9 27		2 10	_	61	8 254
Females	908	88	30	90	53	98	66	66	176	16	8	17 1	19	78	57	19	41	=	8	181	17	_	18	4 7	-		974

TABLE 24.—Exhibiting the Number and Ratio of Illegitimate Births Returned in Fourteen years, 1875-1888.

Years.		Born out of Hock,	Years.		Born out of llock.
iears.	Number.	To Every 1,000 Births.	iears.	Number,	To Every 1,000 Births
1875	198	6.04	1882	301	8.13
1876	266	7.77	1883	811	7.62
1877	316	9.46	1884	198	4.78
1878	202	5.74	1885	248	5.89
1879	292	8.56	1886	300	7.50
1880	425	12.03	1887	422	9.18
1881	882	10.99	1888	591	12.07
Average 14 years				317	8.25

TABLE 25.—Showing the Nativity of Mothers of Illegitimates returned for the Fourteen Years, 1875–1888.

Years.	Totals.	Na	ti v e.	For	reign.	Unkı	own.
	100016	Number.	Per cent.	Number.	Per cent.	Number,	Per cent.
1875	198	96	49.74	82	16.58	65	38.68
1876	286	178	65.04	58	19.92	40	15.04
1877	816	161	50.95	80	25.82	75	23.73
1878	202	114	56.44	84	16.83	54	26.78
1879	292	137	46.92	90	30.82	65	22.26
1880	425	148	84.82	78	17.18	204	48.00
1881	882	187	48.95	98	25.65	97	25.40
1882	801	145	48.17	77	25.58	79	28.25
1883	811	187	44.05	86	27.65	88	28.30
1884	198	103	53.37	69	85.75	21	10.88
1885	248	115	46.37	86	84.68	47	18.95
1886	800	142	47.88	45	15.00	113	87.67
1887	422	151	85.78	72	17.06	199	47.16
1888	591	149	25.21	72	12.18	870	62.61
Average	317	140	46.60	69	22.87	108	30.48

TABLE 26.—Exhibiting, by Sex and Color, the Population of 1884, the Number of Illegitimates returned for the year 1888, and the Per Cent of such Children to Inhabitants.

Color or Race.	Sex.	Population June 1, 1884, represented by births in 1888.	Total Hegitimate births in 1888,	Per cent of births to population,	Per cent of each sex to total of both sexes,	Number of inhabi- tants to one illegiti- mate child of the same color,
	Totals	a 1,847,284	591	.03		3,126
All colors	Males	970,609	298	.03	49.58	3,312
All colors	Females	876,419	298	.03	50.42	2,941
0	Unknown	206				
	(Totals	1,824,196	572	.03		3,189
	Males	958,639	279	.03	48.78	3,436
White	Females	865,547	293	.03	51.22	2,954
	Unknown	10				
	(Totals	6,855	12	.18	********	571
Black	Males	8,691	9	.24	75.00	410
	Females	3,164	3	.09	25.00	1,055
	Totals	8,257	2	.02		4,129
Mulatto	Males	4,201	2	.05	100.00	2,101
	Females	4,056				
	Totals	6,815	5	.07		1,363
Indian	Males	3,581	3 -	.08	60.00	1,177
	Females	3,284	2	.06	40.00	1,642
	Totals	1,041				
Unknown.	Males	477				
Chknown	Females	368				
	Unknown	196		riner; con		
	Totals	15,112	14	,09		1,079
Black and mulatto	Males	7,892	11	.14	78.57	717
	Females	7,220	3	.04	21.43	2,407

a Includes 70 Asiatic males.

TABLE 27.—Exhibiting by Counties, the number of Pairs of Twins, and the number of Illegitimate and Still-born Children returned for the year 1888.

State and counties.	Number of pairs of twins born in 1888.	Number of illegit- imate children born in 1888.	Number of still- births in 1888,	Counties.	Number of pairs of twins born in 1888,	Number of illegit- imate children born in 1888,	Number of still- births in 1888.
State	583	591	1,358	Ingham	6	1	18
	_		2	Ionia	3	2	6
Alcona			3	Iosco	5	1	5
Alger	1	1		Iron	2	2	1
Allegan	15	6	19	Isabella	4	2	7
Alpena	8		6	Jackson	7	3	13
Antrim	2	2	1	Kalamazoo.:	6	2	15
Arenac	8	1		Kalkaska	2		4
Baraga	3	1	2	Kent	23	11	37
Barry	5	1	5	Keweenaw	2	3	5
Bay	13	8	81	Lake	1	1	
Benzie	1	1	5	Lapeer	8		10
Berrien	3	4	14	Leelanaw	3	6	7
Branch	4	2	11	Lenawee	12	4	11
Calhoun	13	3	16	Livingston	5	1	9
Cass	5	4	4	Luce			
Charlevoix	1		3	Mackinac	4	2	4
Cheboygan	.2	2	2	Macomb	8	6	15
Chippewa	4			Manistee	10		25
Clare	1		8	Manitou			
Clinton	8	9	17	Marquette	8		27
Crawford				Mason	9		8
Delta	2		8	Mecosta	1	2	3
Eaton	15	1	16	Menominee	5	4	33
Emmet	 	2	1	Midland	4	3	2
Genesee	9	2	9	Missaukee	1		3
Gladwin	1			Monroe	8	6	16
Gogebic	5		8	Montealm	4	9	20
Grand Traverse	2	1	5	Montmorency	1		1
Gratiot	4	1	12	Muskegon	15	1	38
Hillsdale	5	1	8	Newaygo	1	3	8
Houghton	16	1	25	Oakland	4	1	10
Huron	6	3	15				

TABLE 27.—CONTINUED.—Births, 1888.

Counties.	Number of pairs of twins born in 1888.	Number of illegit- imate children born in 1888,	Number of still- births in 1888.	Counties.	Number of pairs of twins born in 1888.	Number of illegit- imate children born in 1888,	Number of still- births in 1888,
Oceana	5	1	4	Sanilac	14	5	16
Ogemaw				Schoolcraft	2		5
Ontonagon		1	6	Shiawassee	4		5
Osceola	6	2	3	St. Clair	7	12	26
Oscoda				St. Joseph	10	7	6
Otsego	2			Tuscola	18	5	9
Ottawa	17	5	81	Van Buren	5	6	18
Presque Isle			4	Washtenaw	5	1	14
Roscommon			1	Wayne	184	407	511
Saginaw	84	10	76	Wexford	6	1	8

Table 28 gives the names of the townships in Michigan in which it was reported there were no births in 1888. Four of these townships were organized since the census of 1884 and the remaining ones represent a population of 3,491.

Table 29 shows the townships, and the counties in which they are located, from which no returns of births were received for the year 1888. As usual the supervisors failed to make the proper returns to the county clerk.

TABLE 28.—Townships in which it was reported there were no births in 1888.

Counties.	Townships,—No Births	Popul	lation in 18	84.
Counties.	in 1888.	Totals.	Males,	Females.
Totals		8,491	2,076	1,415
Arenac	Turner a			
	(Frederic	855	240	115
Crawford	South Branch	200	110	90
Emmet	Egleston	114	57	57
Gogebic	Marenisco			
Iosco	Thompson	42	26	16
Keweenaw	Clifton	182	96	86
	(Center	79	46	88
Lake	Eden	71	46	25
Mason	Branch	476	296	180
·	(Ætna	128	76	47
Missaukee	Forest	141	74	67
	Goodar .			
Ogemaw	Hill	30	20	10
	Logan a			
Oscoda	Greenwood	88	89	44
	(Charlton	208	169	89
Otsego	Corwith	613	338	275
Roscommon	Denton	183	119	64
	(Marion.	172	94	78
Saginaw	Spaulding	419	230	189
	(Drawing	219	200	4 10

[•] Organized since census was taken.

TABLE 29.—Exhibiting the Counties and Townships from which no returns of Births were received in 1888.

		Population, June 1, 1884.	ation,	June	•	White.	ħ	Black and Mulatto.	k an	TO .	Indian.	ij.	D	Unknown.	wn.	-	Native.		A	Foreign.	,	Un	Unknown.
Counties.	Returns of Births were received for 1888.*	Totals,	Males,	Females,	Totals.	Males.	Females,	Totals.	Males,	Females, Totals,	Males.	Females,	,slateT	Males,	Females.	,statoT	Males.	Females,	Totals,	Males.	Females,	Totals,	Males.
Totals		6,424	3,815	2,609	6,284	3,737	2,547	=	=	1	85 43	8 42	4	22	20	4,199	2,336	1,863	3;196	1,460	786	29	13
	(Detour	615	38	231	299	353	212	00	00		1	-	4	83	18	199	123	76	414	280	154	64	-
Chippewa	Drummond -	400	241	159	811	195	116	67	99	1	84 43	8		-	61	188	106	85	211	135	76	-	1
Kalkaska	Springfield	417	341	176	417	241	176	1	1	1	- 1	1	-	1	1	311	169	142	106	72	35	-	-
	(Lake	291	200	16	291	200	16	1	1	-	1	1	1	1	1	147	#	68	144	116	28	1	i
Lake.	Yates	354	208	146	353	207	146	1	-	1	1	1	1	1	1	246	139	107	16	29	88	Ξ	10
Marquette	Richmond	870	202	165	370	202	165	1	1	-	1	1	7	1	1	176	98	96	194	119	75	1	1
Mecosta	Mecosta	196	428	898	286	428	898	1	1	1	1	1	1	1	1	605	327	278	187	100	8	4	-
Missaukee	Riverside	238	133	105	238	133	105	-	I	-	1	1	-	1	- 1	88	53	43	142	88	62	- [ij
	(Reaver	300	177	123	300	171	123	1	1	1	-1	- 1	- 1	1	1	261	151	110	88	38	13	1	1
Newaygo	Brooks	1,055	280	465	1,055	280	465	1	1	-	1	-	1	-	-	198	470	394	182	114	89	6	9
	Atherton	320	115	105	220	115	105	1	1	1	1	- 1	1	- 1	1	196	104	85	24	11	13		1
	Big Creek	143	88	19	143	88	19	1	1	1	1	- 1	1	1	1	117	65	25	38	17	6	1	
Oscoura	Comins	149	128	21	149	128	22	1	1	+	1	1	1	1	1	72	99	16	11	52	10	-	1
	Harmon	124	98	28	124	99	28	1	- 1	1	1	1	1	1	1	8	44	25	88	22	9	1	1
Schoolcraft	Thompson	533	358	175	588	828	175	-	1	-	+	1	1	1	1	300	175	125	282	183	67	-	1
More front	Liberty	306	114	35	206	114	85	1	1	1	- 1	-1	- 1	1	-	173	85	8	88	23	11		
datolia	Springville.	213	145	88	213	145	88	1			-					152	65	60	RO	62	œ	-	-

* The townships of Mikado, Alcona county, and Trout Lake and Whitefish, Chippewa county, and Harrison, Schoolcraft county, were organized since census was taken.

MARRIAGES, 1888.

The number of marriages whose statistics were recorded in Michigan in 1888 was 17,233. In 1887 the number as first compiled was 17,050, as seen in Table 31, but 122 more marriages were returned for that year with those for 1888. This shows that the marriage law is still violated to some extent although there is a great improvement over the old law, when the additional returns for a previous year would sometimes amount to five or six hundred.

The marriage rate in 1888, the number of marriages to every thousand of the population as given by the last census, was 9.30, or 18.60 persons married. There was, according to the returns, one marriage solemnized to every 107 persons of the living population.

Michigan compares very favorably in its marriage rate with some of the New England States, having a system of registration, as may be seen by the following:

Vermont	17.16
Massachusetts (1888)	19.3
Rhode Island (1887)	
Connecticut	
New Hampshire (1887)	20.1

The average number of marriages for each of certain specified periods of time, during the year 1888, was as follows:

Total number of marriages	17,233
Average number per quarter	4,308
Average number per month	1,436
Average number per week	331
Average number per day	47

In Table 30 is presented the proportion of the marriages in the different quarters of the year. The table gives a summary statement for each of the years 1885–1888, and the average for ten years 1878–1887. The general rule in Michigan in reference to the order of the four quarters of the year has been, fourth, third, second, first, but in 1888 this order is reversed in regard to the second and third, although there is very little diffence between the two. The fourth quarter has by far the largest number for each year and the ten-year average. In Massachusetts, the order of the quarters is fourth, second, third, first, and the same characteristic is shown in the English registration tables. In table 30 the number of marriages for each year is corrected for additional returns up to April 13, 1889.

TABLE 30.—Marriages by Quarters of the year for each of the years 1885-1888, and the Average for ten years, 1878-1887. Corrected for Additional Returns up to April 13, 1889.

Totals and Months	18	1885.		96.	188	87.	18	88.	Average for 10 years, 1878–1887.		
with which Quarters end.	Number,	Per cent.	Number.	Per cent,	Number.	Per cent.	Number,	Per cent.	Number.	Per cent.	
Totals	15,885	100.00	16,658	100.00	17,172	100.00	17,238	100.00	15,775	100.00	
March	3,37 8	21.27	3,576	21.47	8,566	20.76	3,701	21.47	3,467	21.98	
June	8,698	28.25	3,722	22.34	3,987	23.22	4,067	23.60	3,529	22.37	
September	3,771	23.74	4,116	24.71	4,561	26.56	4,049	23.50	3,827	24.26	
December	5,042	31.74	5,237	31.44	5,053	29.43	5,409	31.39	4,946	31.35	
Unknown	1		. 7	.04	5	.08	7	.04	6	.04	
Average a	3,971	25.00	4,165	25.00	4,293	25.00	4,808	25.00	3,944	25.00	

a Including marriages in unknown quarter of the year.

Table 31 differs from Table 30 in that the former shows the number and proportion of marriages for each of the years 1885–1887, as first returned, tabulated and published, without the corrections for additional returns. A comparison of the two tables will show the number of delinquent marriages which has been added to the number as first returned for each of the above years.

TABLE 31.—Marriages by Quarters of the year for each of the years 1885-1888, and the Average for Ten Years, 1878-1887, as originally returned and published in reports.

Totals and Months	18	85.	18	96.	18	87.	18	38.	Average for 10 years, 1878–1887.	
with which Quarters end.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent,	Number.	Per cent.
Totals	15,016	100.00	16,631	100.00	17,050	100.00	17,233	100.00	15,074	100.00
March	3,260	21.71	3,572	21.48	3,563	20.90	3,701	21.48	3,387	22.47
June	3,555	23.67	3,718	22.36	3,979	23.34	4,067	23.60	3,434	22.78
September	3,596	23.95	4,111	24.72	4,549	26.68	4,049	23.49	3,688	24.47
December	4,604	30.66	5,223	31.40	4,954	29.05	5.409	31.39	4,560	30.25
Unknown	1	.01	7	.04	5	.03	7	.04	5	.08
Average *	8,754	25.00	4,158	25.00	4,263	25.00	4,308	25.00	3,769	25.00

a The number in unknown quarter of year included.

With the exception of the year 1887, the month of November returned the largest number of marriages for each year and the average in Table 32. The months of October, November and December seem to be the season most favorable for weddings in Michigan. As in previous years and the average, the month of February holds the lowest place with regard to the number of marriages recorded in any single month in 1888.

TABLE 32.—Marriages by Months, greatest first, for the years 1886-1888, and the Average for ten years 1878-1887, corrected for Additional Returns up to April 13, 1889.

		1886,			1887.			1888.		Average for 10 Years, 1878-1887.			
	Months.	Numb'r.	Per Cent of Total,	Months.	Numb'r.	Per Cent of Total,	Months.	Numb'r.	Per Cent of Total.	Months.	Numb'r.	Per Cent of Total.	
Order.	Total	16,658	100.00	Total	17,172	100.00	Total	17,233	100.00	Total	15,775	100.00	
1	Nov	1,777	10.67	Sept	1,793	10.44	Nov	1,824	10.58	Nov	1,675	10.62	
2	Dec	1,736	10.42	Nov	1,775	10.34	Oct	1,819	10.56	Oct	1,689	10.39	
8	Oct	1,724	10.35	Dec	1,724	10.04	Dec.:	1,766	10.25	Dec	1,632	10.35	
4	Sept.	1,597	9.59	Oct	1,554	9.05	Sept	1,579	9.16	Sept.	1,452	9.20	
5	Mar	1,353	8.12	Aug	1,426	8.30	Apr	1,511	8.77	July	1,247	7.90	
6	July	1,346	8.08	May	1,347	7.84	Мау	1,313	7.62	Apr	1,221	7.74	
7	Мау	1,305	7.84	July	1,342	7.82	Jan	1,280	7.43	Jan	1,210	7.67	
8	June	1,247	7.49	Apr	1,321	7.69	July	1,253	7.27	Мау	1,190	7.54	
9	Jan	1,193	7.16	June	1,319	7.68	June	1,243	7.21	Mar	1,188	7.58	
10	Aug	1,178	7.04	Mar	1,287	7.50	Mar	1,217	7.06	Aug	1,128	7.15	
11	Apr	1,170	7.02	Jan	1,192	6.94	Aug	1,217	7.06	June .	1,118	7.09	
12	Feb	1,030	6.18	Feb	1,087	6.33	Feb	1,204	6.99	Feb	1,069	6.78	
	Unk.	7	.04	Unk	5	.03	Unk	7	.04	Unk.	. 6	.04	
	Av. a	1,388	8.33	Av. a	1,431	8.33	Av. a	1,436	8.33	Av. a.	1,815	8.38	

[•] Includes those for unknown month.

Table 33 gives the number of marriages by months, for the year 1888, as returned from each county in the State.

TABLE 33.—Distinguishing by Counties and by Months, the number of Marriages returned for the year 1888.

,							Mon	ths, 18	188.					
State and Counties.	Year, 1888.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November,	December.	Unknown.
State	17,233	1,280	1,204	1,217	1,511	1,313	1,243	1,253	1,217	1,579	1,819	1,824	1,766	7
Alcona	25	8	1	1	2	1	4	4	2	2	1	2	2	
Alger	9	2	1			1	1		1	2		1		
Allegan	319	28	25	20	26	24	24	10	17	33	28	43	41	
Alpena	137	15	6	7	15	-12	4	13	9	10	24	17	5	
Antrim.	78	3	7	10	5	3	5	3	7	7	7	10	11	
Arenac	32		2	3	9	1	3	2	2	3	1	3	3	
Baraga	28	2	. 41114	1	2	1	3	3	1	4	2	5	4	
Barry	206	17	14	19	8	16	7	13	17	18	15	20	42	
Bay	447	45	26	18	42	45	29	38	43	40	41	48	32	
Benzie	25	Antana	3	1	3	5	2	3	3	2			3	
Berrien	376	29	29	32	27	25	23	33	32	33	36	43	34	
Branch	242	24	23	21	21	15	15	9	19	21	28	21	25	
Calhoun	323	14	23	32	18	27	20	18	19	31	51	33	37	
Cass	172	9	13	18	8	13	13	14	13	17	16	19	19	
Charlevoix	88	9	4	2	7	1	10	8	11	11	8	11	6	
Cheboygan	93	7	5	8	13	5	6	13	9	7	11	6	3	
Chippewa	106	9	7	7	7	9	7	8	8	11	10	16	7	
Clare	68	3	8	5	4	9	4	9	4	5	3	7	12	
Clinton	229	14	14	22	19	16	9	13	13	15	32	39	23	
Crawford	30	2		8	****	2	8	4	2	5	3	3	3	
Delta	149	16	8	11	10	10	11	10	14	10	12	21	16	
Eaton	266	23	16	24	13	14	10	16	26	37	25	28	34	
Emmet	72	6	2	1	6	4	8	10	7	8	6	7	7	
Genesee	326	22	26	27	28	19	20	25	11	25	50	28	45	
Gladwin	18		1	2		1	3	2		1	1	4	3	
Gogebic	121	10	4	13	17	11	14	6	5	10	12	13	6	
Grand Traverse	120	7	6	5	12	10	8.	14	9	13	14	9	13	
Gratiot	238	16	12	18	15	17	13	27	22	33	32	14	19	
Hillsdale	283	23	25	21	17	14	20	14	19	25	29	37	39	
Houghton	331	21	20	18	27	19	33	24	33	45	29	31	31	

TABLE 33.—Continued.—Marriages by Counties, by Months.

							Mon	ths, 18	88.					
Counties.	Year, 1888.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
Huron	169	13	12	11	10	16	9	15	9	10	18	25	21	
Ingham	334	14	27	30	26	25	17	28	22	27	42	40	36	
Ionia	272	13	17	27	19	19	10	28	13	80	28	29	39	
Iosco	123	9	7	6	13	11	7	12	11	6	13	14	14	
Iron	36	3		2	8	7	2	4	3	1	1	3	2	
Isabella	146	12	9	11	11	9	10	12	12	13	10	12	25	
Jackson	337	25	21	33	27	20	18	24	20	35	39	38	37	
Kalamazoo	374	35	21	26	17	35	26	23	23	39	45	50	34	
Kalkaska	52	4	3	2	3	3	1	6	1	4	9	6	10	
Kent	1,048	66	64	59	82	95	99	73	74	100	122	103	111	
Keweenaw	14	2	1	1		2	3	2			1	2		
Lake	69	5	5	5	8	8	3	8	4	9	2	8	4	
Lapeer	247	19	17	16	23	12	13	26	15	26	34	28	23	
Leelanaw	58	3	2	2	7	2	2	3	5	8	14	1	9	
Lenawee	849	16	26	30	25	25	25	20	21	44	87	42	38	
Livingston	167	13	17	17	22	8	15	7	12	9	11	18	18	
Luce	26	2		100	6	1			3	8	1	2	3	
Mackinac	64	2	5.	2	7	5	9	8	4	4	7	6	5	
Macomb	251	19	27	16	29	19	17	12	8	21	24	85	24	
Manistee	222	21	23	10	26	16	20	19	12	17	20	22	16	
Manitou a														1
Marquette	845	23	21	17	28	20	23	39	33	38	39	38	25	
Mason	127	7	8	4	6	7	7	10	12	15	18	28	15	
Mecosta	190	15	15	11	18	14	14	13	14	10	17	19	30	
Menominee	248	19	15	20	32	15	13	25	26	18	28	15	17	
Midland	76	7	6	8	6	4	3	7	3	2	10	6	14	
Missaukee	38	5	2	5	9	2	3	2	5	2	1	1	1	
Monroe	300	29	23	13	33	29	15	20	14	22	27	51	24	
Montcalm	264	17	18	18	84	17	16	15	23	23	21	34	28	
Montmorency	16	1	1	2	2	1	1	4		1	1		2	
Muskegon	427	27	29	27	50	24	40	24	29	39	53	34	51	
Newaygo	168	11	16	11	19	9	13	17	10	12	17	15	18	
Oakland.	320	18	32	36	25	19	19	21	19	21	38	26	46	
Oceana	135	8	4	11	10	11	8	12	16	16	12	14	13	-
Ogemaw	1 191	2	5	13	4	1	1	2	3	8	6	5	2	

^{*} No returns from county clerk.

TABLE 33.—Continued.—Marriages by Counties, by Months.

		2					Mor	ths, 18	88.					
Counties.	Year, 1888.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
Ontonagon	18	1	2	1	2		1		1	2	3	1		
Osceola	128	6	12	10	12	9	14	11	11	12	8	9	14	
Oscoda	18	2		1	3	1	1		2	2		5	1	
Otsego	44		6	2	2	4	4	7	3	4	7	1	4	
Ottawa	229	18	11	15	27	18	19	13	20	20	29	17	22	
Presque Isle	32	8	4	2	5			1	3	4	1	8	1	
Roscommon	17	2			4			1	1		3		6	
Saginaw	635	55	40	31	50	77	48	41	46	59	60	57	65	6
Sanilac	224	16	12	14	20	21	17	24	10	26	21	18	25	
Schoolcraft	53	1	2		4	6	5	9	4	5	7	3	7	
Shiawassee	276	16	15	87	25	19	18	17	20	22	30	27	30	
St. Clair	445	37	35	23	47	32	34	26	19	32	52	64	44	
St. Joseph	201	21	22	19	14	9	15	8	12	18	15	19	29	
Tuscola	233	11	18	28	24	14	14	17	17	22	27	26	15	
Van Buren	274	24	16	33	24	14	12	20	20	14	30	30	37	
Washtenaw	312	. 15	25	26	27	24	80	14	16	27	30	88	40	
Wayne	1,967	177	153	91	185	193	190	126	145	182	194	193	138	
Wexford	116	11	6	13	10	11	7	11	10	6	14	9	8	

COLOR OF PERSONS MARRIED.

Table 34 shows the marriage-rate in 1888 among the different races in Michigan. There are no great changes in the rates from those of 1887, there being a slight increase among the white and a dropping off among the black, mulatto, and indian races. As these marriage-rates are computed from the population of Michigan in 1884 with the marriages in 1888, due allowance should be made for the increase in population.

From the foot-notes of Table 35 may be seen the number of mixed marriages which occurred during the year 1888. Five white females married males of another color, one to a black groom, two to mulattoes, and two to indians. Ten white males have been returned as having married brides of another color, nine to indians and one to a black bride.

TABLE 34.—Exhibiting, by Color and Sex, the Number of Marriages and the Per Cent of Persons Married in 1888 to Population in 1884.

		Domilation	!	Persons Ma	rried, 1888.	Per cent of Persons	Number of Persons
Color, 1888.	Sex.	Population June 1, 1884, represented by marriages in 1888,	Marriages,	Number,	Per cent of Totals.	Married in 1888 to Pop- ulation June 1, 1884, by Sex and Color.	who Mar-
	Totals	1,852,460	17,233	34,466	100.00	1.86	64
All colors	Males	973,877		17,233	50.00	1.77	34
all colors	Females	878,572		17.233	50.00	1.96	34
	Unknown .	11					
	Totals	1,829,565	17,054	34,103	98.95	1.86	1!
White	Males	961,875	·	17,054	49.48	1.77	10
winde	Females	867,680		17,049	49.47	1.96	
	Unknown .	10					
	Totals	6,856	94	180	.52	2.62	10
Black	Males	3,692		94	.27	2.51	1:
	Females	3,164		86	.25	2.72	
	Totals	8,267	42	89	.26	1.07	1'
Mulatto	Males	4,211		42	.12	.99	
	Females	4,056		47	.14	1.16	1
	Totals	6,812	42	92	.27	1.35	1:
Indian	Males	3,528		. 42	.12	1.19	:
	Females	3,284		50	.15	1.52	10
	Totals	890	1	2		.22	
One or both unknown.	Males	501		1		.20	
one or boun unanown.	Females	388		1		.25	
•	Unknown .	1					
	Totals	15,128	136	269	.78	1.77	3:
Black and mulatto	Males	7,903		136	.89	1.72	10
	Females	7,220		183	.39	1.84	1:

TABLE 35.—Exhibiting for the State and Counties, the Number of Marriages returned for the year 1888, and the Color of Persons Married in 1888, stated by Couples.

	×	Cole	or of Per	sons Ma Cou	rried,	1888, st	ated b	y
State and Counties.	Marriages, 1888.	White.	Black,	Mulatto.	Indian,	Female unk., male white.	Male unk female white.	Both unk.
State	17,238	a 17,054	b 94	c 42	d 42			1
Alcona	25	25						
Alger	9	e 9				 -		
Allegan	319	318	1					
Alpena	137	137						
Antrim	78	77			1			
Arenac	32	32		 				
Baraga	28	f 22			g 6			
Barry	206	206				 		
Bay	447	443	8		1			
Benzie	25	24	h 1	 				
Berrien	376	371	5			ļ 		
Branch	212	242						ļ
Calhoun	323	319	i 2	jk 2		: 		
Case	172	160	12		ļ .			
Charlevoix	88	86			2			
Cheboygan	98	1 93				ļ 		
-Chippewa	106	m 97			9	¹		
Clare	68	68			:			
Clinton	229	229	ļ	 	<u> </u>			
Crawford	30	30		 		ļ		
Delta	149	146		n 2	1	!		
Eaton	266	265	1		 	ļ		
Emmet	72	0 71	. 	 	1	ļ 		
Genesee	326	323		p 8				

a 9 couples, male white, female indian; 1 couple, male white, female black.
b 11 couples, male black, female mulatto; 1 couple, male black, female white.
c 3 couples, male mulatto, female black; 1 couple, male mulatto, female indian; 2 couples, male mulatto, female white.
d 2 couples, male indian, female white.
e 1 couple, male white, female indian.
f 2 couples, male white, female indian.

g 1 couple, male indian, female white.
h 1 couple, male black, female mulatto.
i 1 couple, male black, female mulatto.
j 1 couple, male mulatto, female black.
k 1 couple, male mulatto, female indian.
l 1 couple, male white, female indian.
m 1 couple, male white, female indian.
n 1 couple, male white, female white.
o 1 couple, male mulatto, female white.
p 1 couple, male mulatto, female white.

TABLE 35.—Continued.—Marriages in 1888, by Counties, by Color.

	ø.	Colo	or of Per	Sons Man Coup	ried, 1 les.	888, sta	ated by	У
Counties.	Marriages, 1888.	White.	Black.	Mulatto,	Indian,	Female unk., male white.	Male unk., female white.	Both unk.
Gladwin	18	18						
Gogebic	121	121						
Grand Traverse	120	119			1			
Gratiot	238	238					,	
Hillsdale	283	282	1					
Houghton	331	331						
Huron	169	169						
Ingham	334	328	q 4	r 2				
Ionia	272	272						
Iosco	123	123						
Iron	86	36						
Isabella	146	139			7			
Jackson	337	329	6	2				
Kalamazoo	374	365	8 4	5				
Kalkaska	52	52						
Kent	1,048	1,041	t 3	. 4				
Keweenaw	14	14						
Lake	69	69						
Lapeer.	247	246	1			1000		
Leelanaw	58	58		(2)				
Lenawee	349	344	3	2		-5-0		
Livingston	167	167	1					
Luce	26	26			U			200
Mackinac	64	u 58			v 6			
Macomb.	251	251		Total				
Manistee	222	222			01			
Manitou*								
Marquette	845	345				*****		
Mason	127	126		********	1			
Mecosta	190	189	1					
Menominee.	243	241	1		2			
Midland	76	75			1			
Missankee	38	38		-	1			
AND DOMESTIC OF THE PROPERTY O	300	299	w 1		777			
Monroe	800	299	w 1	******		******		

q 2 couples, male black, female mulatto. r 1 couple, male mulatto, female black. s 1 couple, male black, female mulatto. t 3 couples, male black, female mulatto.

u 3 couples, male white, female indian. v 1 couple, male indian, female white. v 1 couple, male black, female white. *No returns from county clerk.

TABLE 35.—CONTINUED.—Marriages in 1888, by Counties, by Color.

	œ.	Colo	r of Pers	ons Mar Coup	ried, 1 les.	888, st	ated b	у
Counties.	Marriages, 1888.	White.	Black.	Mulatto.	Indian,	Female unk male white.	Male unk., female white.	Both unk,
Montealm	264	262		1	1	*****		
Montmorency	16	16						
Muskegon	427	426			1			
Newaygo	168	168						
Oakland.	320	319		1				
Oceans	135	134			1			
Ogemaw	52	52						
Ontonagen	13	18						
Osceola	128	128						
Oscoda	18	18						
Otsego	44	44						
Ottawa	229	228	1					
Presque Isle	32	32						
Roscommon	17	17	y					
Saginaw	685	631	x 2	y 1				. 1
Sanilac	224	224						
Schoolcraft	58	58						
Shiawassee	276	276						
St. Clair	445	443	2					
St. Joseph	201	200		1				
Tuscola	233	233						
Van Buren	274	267	1	6				
Washtenaw	312	297	11	4				
Wayne	1,967	z 1,933	aa 28	6				
Wexford	116	116						

x 1 couple, male black, female mulatto. y 1 couple, male mulatto, female black.

NATIVITY OF PERSONS MARRIED.

Table 36 shows the marriages in 1888, arranged according to the nativity of the persons married. Upon examination it is seen that there were 11,131 native-born grooms to 11,805 native-born brides, and 6,090 foreign-born grooms to 5,049 foreign-born brides. There were 12 grooms and 379 brides whose nativity was not stated in the returns. There were 1,350 native-born males who married foreign-born brides and 308 who married brides whose nativity was not returned. There were also 2,324 native-born females who married foreign-born males and eight who married males whose nativity was not given in the returns.

z 1 couple, male white, female black. as 2 couples, male black, female mulatto.

The percentage of native-born grooms to the whole number married was 64.59, in 1888, 66.02 in 1887, 67.73 in 1886, 68.51 in 1885, 66.70 in 1884 and 66.22 in 1883. The foreign-born percentage of grooms for the same period of years was 35.34 in 1888, 33.54 in 1887, 31.65 in 1886, 30.88 in 1885, 32.62 in 1884, and 33.00 in 1883. The native-born brides were 68.50 in 1888, 69.91 in 1887, 71.46 in 1886, 71.44 in 1885, 69.59 in 1884, and 69.62 in 1883. The foreign-born brides were 29.30 in 1888, 28.73 in 1887, 27.53 in 1886, 27.61 in 1885, 29.34 in 1884, and 29.33 in 1883.

TABLE 36—By Nativity, the Number and Per Cent of Brides and Bridegrooms returned for the Year 1888.

	1	Brides, 188	8.	Bridegroo	ms, 1888.
Bridegrooms and Brides,—Nativity Specified.	ative- born,	Foreign- born,	Unknown.	Total of each nativity and all nativities	Per cent of each nativity.
(Native-born	9,478	1,350	308	11,137	64.59
Bridegrooms Foreign-born	2,824	3,698	68	6,090	35.34
Unknown	8	1	3	12	.07
(Whole No. of each nativity and total	11,805	5,049	379	17,233	
Brides. { Per cent of each nativity and total	68.50	29.30	2.20		100.00

The marriage-rates for the total population and for the native and foreign-born inhabitants may be seen in Table 37. As compared with the year 1887, there is little difference in the percentage as computed for the total of all nativities, but there is a slight falling off in the per cents for the native and a corresponding increase in the per cents for the foreign-born. The year 1888 gives for the native-born, total 1.69, males 1.60, females 1.78; in 1887 they were, total 1.71, males 1.62, females 1.80. The foreign-born of 1888 were, total 2.29, males 2.24, females 2.35; in 1887 they were, total 2.18, males 2.10, females 2.28. The increase in the number of marriages for 1888, as shown by the above figures, comes from the foreign-born. This fact is also shown in the number of persons married; in 1887 there were 23,175 native-born persons married and 10,617 foreign-born; in 1888 there were 22,936 native-born persons married and 11,139 foreign-born. This shows an increase of 522 among the foreign-born and a decrease of 239 among the native-born.

In order to learn the actual marriage-rate, the number of marriages must be divided by the number of inhabitants at marriageble ages at the time of the occurrence of the marriages. The nearest approach to the actual marriage-rate for 1888 is that based upon marriages in 1888 and the inhabitants in 1884 as is done in the tabular exhibit which follows table 37. By this exhibit it appears that the marriage-rate among the native-born inhabitants in 1888, was slightly greater than among the foreign-born, and that it is greatest among the native-born females and least among the foreign-born males.

TABLE 37.—Exhibiting by Sex, the Nativity of Persons Married in Michigan in 1888, and the Population in 1884.

	Marriag	res, 1888.	Population resented b				Per	sons Ma	arried,	1888.	
Nativity of Persons Married, 1888,	Number,	Per cent of Total,	Totals,	Males.	Females,		Numbe	r.	mar popi	ent of pried in alation ovity, J	1888 to of same
						Totals	Males.	Fe- males.	Totals	Males.	Fe- males,
Totals.	17,233	100,00	1,852,460	978,877	878,572	84,466	17,233	17,233	1.86	1.77	1.96
Native-born	9,473	54.97	1,856,966	695,127	661,835	22,936	11,131	11,805	1.69	1.60	1.78
Foreign-born Foreign male and native	3,698	ł	,,	272,115	214,517	11,139	6,090	5,049	2.29	2.24	2.35
female Foreign female and native male	2,824 1,850	1					•				
Nativity unknown	388	2.25	8,854	6,635	2,213	391	12	379	4.42	.18	17.18
One or both native	18,147	76.29									
One or both foreign	7,872	42.78					 -	- -			

`	Inhabitan 15 Y	nts June 1, ears and C	1884, Aged ver.	· Person	ns Married	ì, 1888.	Marrie habita	nt of Pe d in 1889 nts June 5 Years a	8 to In- 1, 1884,
Nativity.	Both sexes.	Males.	Females.	Both sexes.	Males.	Females.	Both sexes.	Males.	Females.
All nativities	1,218,684	649,588	564,046	34,466	17,283	17,283	2.84	′ 2.65	3.05
Native	782,620 423,884	403,790 239,827	378,830 183,557	22,936 11,139	11,131 6,090	11,805 5,049	2.98 2.63	2.75 2.54	3.11 2.75

In Table 38 are presented the percentages, for a period of fourteen years, from 1875 to 1888, with reference to the nativity of the persons married. The decrease in the percentage among the native-born is quite marked since the year 1885 as is also the increase in the foreign-born.

As compared with the average, the year 1888 presents even greater contrasts than with the year 1887, the native-born being 4.63 per cent less than the average, and the foreign-born 4.06 per cent greater than the average.

In the class of marriages of persons of mixed parentage, that is one native and the other foreign, there has been an increase in the class of foreign-born gracm and native-born bride, and a corresponding decrease in the opposite class. As compared with the average however, there appears but little difference.

TABLE 38.—Per Cent of Marriages, by Nativity, in Michigan for Fourteen Years, 1875–1888, and the Average for these Years.

Years.	Both na- tive-born,	Both for- eign-born,	Native-born groom and foreign- born bride,	Foreign- born groom and native-born bride,	Unknown,
1875	61.55	16.08	7.85	12.88	2.14
1876	62.44	15.02	7.01	13.26	2.27
1877	63.83	14.81	7.18	13.05	2.18
1878	63.83	12.68	7.72	13.48	2.29
1879	64.15	12.78	7.40	18.58	2.11
1880	- 62.17	15.20	7.48	18.02	2.18
1881	59.80	18.00	8.18	12.75	1.77
1882	58.15	19.61	8.72	12.47	1.05
1883	57.19	20.60	8.65	12.27	1.29
1884	57.28	20.32	9.00	12.11	1.29
1885	59.14	18.65	8.90	12.13	1.18
1886	58.50	18.71	8.76	12.79	1.24
1887	56.65	20.22	8.47	13.10	1.56
1888	84.97	21.46	7.83	13.49	2.25
Average	59.90	17.40	8.05	12.88	1.77

AGES OF PERSONS MARRIED.

Table 39 gives the Average age, at time of marriage, of both males and females for all nativities, for the native and foreign-born and also for those of unknown nativities. In the average age for all nativities for 1888 there appears an increase of nearly a year as compared with those for previous years and the average. As usual the marriages of those of foreign nativity show a greater average age for both males and females than those of the native-born.

TABLE 39.—By Nativity, the Average Age of Persons Married in Michigan in 1885-1888, and the Average for ten years, 1878-1887.

Nativity of Persons	188	35.	189	86.	188	37.	18	88.	Average 10 Y 1878-	ears.
Married.	Males.	Females.	Males.	Females.	Males.	Females.	Мајев.	Females.	Males.	Females.
All nativities	28.85	23.39	28.26	23.85	28.60	28.57	29.20	24.43	28.23	28.28
Native	27.81	22.87	27.78	22.85	28.17	28.17	28.07	28.00	27.78	22.86
Foreign	29.51	24.70	29.28	24.68	29.40	24.54	29.29	24.81	29.83	24.42
Unknown	80.62	23.95	28.44	24.26	29.85	28.69	30.25	25.49	29.44	28.95

Table 40 contains much that is interesting and valuable concerning the number and proportion of males and females married at each period of age in Michigan during the year 1888. The proportion of males married under 20 years of age was less in 1888 than in any year of the previous ten, being 2.86 in 1878 and 1.80 in 1888. The proportion of females married under 20 has decreased from 37.68 per cent in 1878 to 31.85 per cent in 1888. The average per cent for the period of ten years, 1878–1887, was 2.45 for males under 20 and 34.71 for females. The proportion of males married between the ages of 20 and 25 was slightly greater in 1888 than in 1887, but less than for any of the previous ten years, being 41.29 per cent in 1878 and 37.40 per cent in 1888. The average per cent for the ten years, 1878–1887, was 39.54. The proportion of females married at this period of age has increased each year for the last four years, being 36.64 per cent in 1885 and 40.34 in 1888. The average per cent for the period of ten years, 1878–1887, was 38.41.

Over 70 per cent of all the males married in Michigan 1888 were between the ages of 20 and 30 years, and 54.77 per cent of all the females were married at the same period of years.

PERSONS MARRIED UNDER TWENTY-ONE YEARS OF AGE.

The number of persons who were married in Michigan in, 1888 under the age of twenty-one years may also be seen in Table 40. There were 8,107, of whom 833 were males and 7,274 were females. This is not as large a number as has been returned for previous years, that for 1887 being 8,455 persons, of whom 1,071 were males and 7,384 were females. In 1886, there were 8,536 persons, of whom 1,088 were males and 7,448 were females. The percentage of all married under 21 to the whole number married was 23.52 in 1888, 24.79 in 1887, 25.66 in 1886, 25.23 in 1885, 25.14 in 1884. As may be seen from the above facts that, notwithstanding the fact that the number of marriages for 1888 was larger than for any year during the whole period of registration, the proportion of persons married under twenty-one years of age is less than for any of the above-mentioned years.

According to the marriage laws of Michigan, only males who have attained the full age of 18 years and females the full age of 16 years, are capable of contracting marriage. It is certainly gratifying to note the fact that in 1888 no males were married under the legal age and but 26 females, five at fourteen and 25 at fifteen years of age.

TABLE 40.—Exhibiting, by Sex, and by Periods of Age, the Number and Per Cent of Persons Married during the Year 1888.

			1	farriages, 18	388.		
			Males.			Females	•
Ages in Years and Periods.	Total number of Persons Married 1888.	Number Married,	Per cent of Total Married.	Per cent of Persons married at corres- ponding ages,	Number married,	Per cent of total married,	Per cent of Persons married at correspond- ing ages.
All ages	34,466	17,288	100.00	50.00	17,283	100.00	50.00
14	5				5	.03	100.00
15	21				21	.12	100.00
l 6,_	787	. . 			787	4.28	100.00
	1,038				1,038	6.02	100.00
8	2,034	77	.45	3.78	1,957	11.86	96.22
9	1,964	233	1.35	11.86	1,731	10.04	88.14
0	2,308	523	3.04	22.66	1,785	10.36	77.84
11 to 25	11,089	5,922	34.37	53.40	5,167	29.98	46.60
25 to 30	8,166	5,680	32.96	69.56	2,486	14.43	30.44
0 to 35	2,955	2,106	12.22	71.27	849	4.93	28.78
5 to 40	1,469	962	5.58	65.49	507	2.94	84.51
10 to 45	918	589	3.42	64.16	329	1.91	35.84
15 to 50	582	361	2.10	62.03	221	1.28	37.97
50 to 55	414	254	1.47	61.85	160	.93	38.65
55 to 60	295	183	1.06	62.08	112	.56	87.97
30 to 65	192	131	.76	68.23	61	.35	31.77
35 to 70	138	109	.63	78.99	29	.17	21.01
0 to 75	74	62	.36	83.78	12	.07	16.22
5 to 80	1	28	.16	90.32	8	.02	9.68
0 and over	6	6	.03	100.00			
Unknown ages	30	7	.04	28.88	28	.13	76.67
Under 15	5				5	.03	100.00
15 to 20	5,794	310	1.80	5.35	5,484	31.82	94.65
20 to 25	13,397	6,445	37.40	48.11	6,952	40.34	51.89

TABLE 41.—Exhibiting for the State and Counties, by Sex, the Nativity and Age in Periods of Years, of Persons Married in Minhigan during the near 1888.

	,beir		Nativit	y of P	Nativity of Persons Married 1888, Stated by Couples.	Marri uples.	ed 1888	, State	d by				Marr	Marriages at different Ages, Stated in Periods of Years, 1888.	t diffe	ent Ag	res, Sta	ted i	Per	riods	of	Years	, 188	8	
State	१८८ एउ	1	'u.	evitac	-eu *s	Fem	Females Unknown.	Males Unknown.	les own.																-
and	dnos	riod-e	iod-m	ales, 1	msje	Ma	Males.	Females.	nles.	'UMO	Stated.														
sarduno	Number of 1888.	Both native	Both foreig	Foreign ma	Foreign fe	, эмпей	Forelgn,	Vattre,	Foreign,	Both unkn		Under 20.	.62 01 02	.08 of 62	30 to 32°	.04 ot 68	401045.	45 to 50.	.66 to 55.	.09 01 66	.60 to 65.	.07 01 68	.er ot or	12 40 80	Both unkn
											Totals	5,799	13,397	8,166	2,955	1,469	816	582	414	295	192	138	14	15	90
State	17,233	17,238 9,478	3,698	2,324	1,350	808	89	œ	-	00	- Males	810	6,445	5,680	2,106	963	289	361	254	183	181	601	62	88	8 7
											Females	5,489	6,952	2,486	849	201	829	221	160	112	19	65	2	20	83
				1							(Males	1	9	6	10	63	1	71	1					1 1	1 :
Alcona	S	*	2	-	23	1	-	1	-	1	Females	œ	7	00	-	-	-	4	i	1	1	Ì	i		- 1
			,								(Males	-	60	10	-	1	-	1	į	-1	1	1	1	1	-
Alger	6	-	7	03	613	-	*****	-	-		Females	60	63	63	1	\$1		-	1	-	1	- 1	-	-	- 1
	5	7,0	5	9	ţ	•					(Males	9	136	88	36	17	Ħ	10	40	9	00	60	- 1	00	-
Allegan	818	244	H	200	1	23	-	1		:	Females	121	125	38	11	00	1	+	50	+	90	1	-	-	-
	10.	96			9						(Males	-	26	19	24	9	43	570	*	1	1	1	1	-	1
Alpena	181	3	2	5	2		-	-		1	Yemales	20	29	20	+	00	20	-	-	- [-	1	i	1	- 1
		*	-	9	,	9	,				(Males	23	33	38	10	10	90	63	- 1	-	-	1	1	1	1
Antrim	0	-	1	2	-	•	-		27277	1	Females.	42	18	11	00	61	-	-	+	1	1	1	1	1	+
	9	9	*	•		,					(Males	1	11	14	1	H	03	1	г	-	1	-	1	-	+
Arenac	22	0	CI	0	19	-	1	-	*****	1	Females.	19	00	-	23		1	-	1	-	1	-	i	1	
	3		•			,					(Males	-	11	10	00	00	-	1	1	-	- 1	1		- [- 1
Baraga	23	=	2	0	20	7				-	7 Females	œ	11	7			-	7							

TABLE 41.—Continued.—Marriages by Counties, Nativity, and Periods of Age.

	,beltī	7.	Nativi	ty of F	erso	ns Mar Couple	ried 1	, Nativity of Persons Married 1888, Stated by Couples.	ated by				Mari	Marriages at Different Ages, Stated in Periods of Years, 1888.	t Diffe	rent A	g. 808	ated i	п Ре	riods	3 of	Year	, 188	œ,	
	em sel	1	'u.	evitan	-BA ,	Fe	Females Unknown.		Males Unknown,																-
Counties.	Inos ;	nod-e	toq-td	rjes' i	səlem ,		Males.	Pe	Pemales.	*UMO	Stated,														_
	Number of 1888.	Both native	Both foreig	Foreign males,	Foreign fer	,9vileN	Foreign.	Native,	Foreign,	Both unkn		Under 20.	20 to 25.	25 to 30.	30 to 32.	32 to 40.	40 to 42'	45 to 50.	.66 to 55.	,09 of 55	,68 of 08	.07 of 65	,67 ot 07	12 40 80.	Both unkno
	908	101	, k	10	۰						(Males	10	88	28	22	11	9	ıc	63	-	-	00	-	67	
Darry	3	707	3	10	•	1	1	-	-	1	(Females	71	82	12	6	65	10	*	н	63	62	1	-		-
	-	7	101	44	-		_				(Males		159	166	45	100 100 100 100 100 100 100 100 100 100	12	6	10	-	64	00	1	-1	+
Day	-	3	101		5			-			Females	158	178	99	18	16	6	03	-	00	-	-		1	- 1
Dominio	96	¥		0	•	-					(Males	-	10	ю	ю	99	1	-	-	-	1		1	1	+
OH WHO	3	3	3	•		1	1	-			(Females	#	6	4		-	1	-	-	-		1			- 1
Rownian	878	606	86	88	17	-				-	(Males	9	158	110	88	24	6	10	*	00	н	00	03	-	-
To the second se	-	1	3	8	1				-	1	Females	118	164	35	23	12	00	89	9	1	60		н	-	-
Beenoh	676	066	9	r							(Males	6	8	57	39	6	00	7	00	10	9	4	67	-	- ;
Bulcul	25	000	•				_	1			Females	\$	26	31	15	00	20	9	00	00	н	-	1	1	- 1
Calbonn	898	96.9	=	66	+						(Males	13	129	80	41	22	10	7	10	4	4	10	00	-1	+
	9	1	1	3	4	4	_	_	-	1	Females	26	142	45	18	15	10	63	4	*	94	61	1		÷
	179	180	•	-	4			_			(Males	63	76	8	18	10	03	4	27	-	4	00	-	-	-
	-	2	•				-				Females	98	68	18	14	69	-	*	09	-	00		i	-	+
Charlenois	8	06		-	-	0	_	-			(Males	03	88	23	9	7	7		-	-	-		1	-	+
dation of A	6	8		1	•			_			Females	48	22	6	4	69	-		4	63			1		+
	8	8	8	à							(Males	1	88	31	18	7	4	01	1	- 1	F	-	1	- 1	+
Cheboygan	2	3	2	3	_	-	1	-	-	-	Females	150	88	19	00	00	1	-	1						-

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Ompowe	3	\$	\$	3	3	•	3			<u>~</u>	Females	4	88	12		1		+	<u> </u>	+			i	!
Ę	8	8	t	9	•					<u>~</u>	Kales	61	8	\$	0	83	တ	63	÷				i	:
Clare	3	8	-	9	3				Ī	$\frac{\sim}{1}$	Females	8	23	7	9	83	-	-	$\stackrel{!}{\dashv}$	<u> </u>			i	-
	ş	Ş	1	9	ç	¥		١			Males	8 0	88	67	2	•	=	60	-		69	i	87	- ;
Clinton	Š) (1	9	3	3	9				<u>~</u>	Females	92	88	83	13	*	0	-		7	_		=	
	S	ş	Ş		•				-		Males		Ħ	2	7	-	-	-	$\stackrel{:}{\dashv}$				i	-
Crawtord	8	3	3	•	•		-			~	Females	=	12	-6	<u> </u>	- 1	-	69	<u> </u>	+		-	i	<u></u>
1	9			ē	٥				•		Males	7	22	25	ձ	7	တ	67		- 27			Ť	-
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	8	3		8	•						Males	<u></u>	111	8	\$	13	2	-			**	93	T	:
Eaton	ê R	2		8	•				-	<u>~</u>	Females	105	26	83	21	20		89	~	=		1	Ť	-
	1	1	,	ç	•	•	•		<u>·</u>		Males	-	ន	×		10	20	=	-				-	+
Emmet	7	, i	=	2	4	10	-		İ	<u>~</u>	Females	83	83	•	-	69	83		- 27			-	i	- !
	ş	ş			8	•					Males	9	128	88	88	81	8	9		67	29	-	63	- 1
Genesee	8	3	7	8	8	-			Ī	$\frac{\sim}{1}$	Females	88	136	8	8	∞	9	9		1	~	83	i	-
	Ş	;	•	•	•		,			<u>~</u>	(Males		œ	7	60	64	-	-	\div	\dashv		-	i	-
Gladwin	4	=	N	-	10		4		i.	~	Females	9	₹	:	တ	-	-		-	_			i	-
	Ş	ş	E	;	•	,	,				Males		\$	25	15	7	-	+	$\stackrel{dash}{-}$				T	-
dogenic	121	2	2	9	0	-	-		Ī	$\frac{\sim}{1}$	Females	24	8	8	ĸ		-	-	_	+			i	-
E	ş	i	8	;	•	•	•				Males		8	22	17	90	-	*	-			-	Ť	;
G'd Traverse.	RET	*	8	=	>	*	N			$\frac{\sim}{1}$	Females	8	23	15	-	20	69	-					i	-
1011	000	Ş	•	ē	¥	đ				<u>~</u>	Males	10	115	8	8	91	4	10	-	∞	_	I	_	-
diamor	3	- -	•	1	3	9				$\widetilde{}$	Females	116	12	83	2	-	ю	+	- -		_		Ť	-
Utilledale	906	987	•	9	M	r				<u>~</u>	Males	2	118	35	19	2	21	ю			_		Ť	- 1
armarra	3	i	9	3	•	•		!	İ	$\widetilde{\mathbb{T}}$	Females	56	113	8	9	00	-	+	-				Ť	1
Homelyton	8	2	ş	9	;					<u>~</u>	Malee	7	711	128	8	19	80	4	~	8			ī	1
Tong month		5	<u> </u>	8	=	\mathbb{F}	-	$\lceil \rceil$		$\widetilde{} $	Females	108	125		8	•	-	-	-	-	_		-	-:

TABLE 41.—Continued.—Marriages by Counties, Nativity, and Periods of Age. .

	,beirn	-	Nativi	ty of P	erson	Marr Jouple	ried, 1	Nativity of Persons Married, 1888, Stated by Couples.	ted by				Marri	Marriages at Different Ages, Stated in Periods of Years, 1888.	Differ	ent Ag	es, Sta	ted in	Peri	spo	of Ye	ars,	1888.	*	
	१९क्ष १७३१		'1	еуреп	evitan	Fe	Females Unknown.		Males Unknown,																
Counties,	dnoə 3	nrod-e	noq-u	səles,	'səleu	M	Males.	Fet	Females.	'UMO	Stated.			Je.							_	-	_		
	Number of	Both native	Both foreig	Foreign m females,	Forelgn fer males,	.evtleV	Foreign,	Authe.	Foreign,	вогр Спкп		Under 20.	20 to 25.	.08 of 62	80 to 32.	85 to 40.	40 to 45.	45 to 50.	.66 to 55.	.09 of 66	.60 to 65.	.07 of 68	70 to 75.	75 to 80.	Wo and ove
	700	9	5	5	8	•					(Males	1	54	70	22	7	00	93	64	-	1	1	-	- (1
Huron,	ROT	9	70	8	ŝ	10	-	1		1	Females	15	78	58	1	o)	-	63	03	1	-	i	1	1	-
6	,	9	8	-		5					(Males	13	151	68	62	15	14	9	6.5	4	+	-	10	1	-
Ingham	### F	248	20	31	13	9	-	_	1	1	Females	111	124	77	16	11	4	4	10	10	-	-	i	-	- 1
	9	900	9	•	9						(Males	7	101	86	22	18	00	00	63	0.3	99	00	ic	-	1
lonia	20	283	2	#	12	8	1		-	1	Females	88	112	3	6	п	7	63	63	00	50	- 1	-		1
	100	8	9	9	8						(Males	-	43	25	11	9	00	-	23	1	1	1	1	1	1
10800	153	3	9	8	20	++-			-	1	Females	46	49	18	9	63	1	-	63	1	1	i	i	1	1
	98	t		•							(Males	7	11	16	4	23	-	1	i	i	i	i	i	i	- 1
Tron	00	•	5	0	q	-	1			1	\ Females	12	14	7	67	1	-	İ	1	1	i	i	i	i	- 1
Tenhalla	971	8	90	à	2						(Males	+	28	36	119	9	7	7	7	-	-1	1"	1	1	1
Темпена	THO THE	9	3	5	1	•	1		-		Females	63	46	13	4	6	7	03	00	-	-	1	i	1	-
Toolean	200	959	16	9	7	ĸ					(Males	7	118	109	32	119	10	00	п	+	6	10	63	00	7
dackson	9	900	3	2	1	•		-			Females	88	136	21	119	6	6	1	7	-	92	00	1	1	1
Kalamana	1.00	969	20	3	26	a					(Males	6	147	108	45	88	13	9	1	00	*	œ0	-	-	1
Maramazon	***	200	3	5	5		1	-		1	Females	111	146	19	21	14	6	92	60	63	63	-	-	1	1
Vellender		08	1.5	•	1	k!					(Males	-	23	18	9	63	1		6.3	1	i	1	i	1	1
Dalkasha	9	8				-	1	-			Females	31	14	01	00	63						=			-

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14 5 4 5 5 7 1 1	Be 00	7,00		3	1	В	•	-		-	<u>~</u>	emales	863	3	151	47	\$	22				-	1		1
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845 58 241 89 12	Mailister		•	8	3	=			 	!	<u>~</u>	emales	28	8	*	#	7	•	67	~7	- 1	<u> </u>	1	-	-
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	TO TO THE TOTAL		; ;	3	3	<u>-</u> -				<u>:</u> :	≗ 	emales	\$	23		10	~	~		_	_	_	_		_

TABLE 41.—Continued.—Marriage by Counties, Nativity, and Periods of Age.

	rried,	4	Nativi	ty of P	ersons	Marri	fativity of Persons Married, 1888, Stated by Couples.	Stat	ed by			T /x	Marri	Marriages at Different Ages, Stated in periods of Years, 1888.	Diffe	ent Ag	ges, Sta	ted in	per	ods	of Ye	ars,	1888.		
	ism səl	117	,	evilar	eviten	Fen	Females Unknown.	.ales.	les, own,																
Counties.	cond;	nrod-e	п-рог	r ,səla	, solan	Ma	Males.	Females	ales.	*UMO	Sex Stated.														
	Number of	Both native	Both forelg	Foreign m	Foreign fer males,	,eviteN	Foreign,	.evilaN	Foreign,	Botp mym		Under 20.	20 to 25.	.08 of dg	.68 ot 08	32 to 40.	40 to 45,	45 to 50.	.66 ot 06	55 to 60.	.60 to 65.	.07 of 68	70 to 75.	75 to 80.	Wo and ove
	90,	8	8	8	1						(Males		79	29	21	13	9	*	63	1	03	91	1	1	1
Mecosta	3	3	200	8	1	*	7	-	-	1	Females	78	88	14	=	п	1	4	63	-	-		1	- 1	-
	96	à	101	5	•						(Males	+	78	16	42	15	10	67	4	- 1	1	1	1	11	- 1
меношине	3	8	100	in a	0					1	Females	57	111	36	17	30	55	1	+	03	1	1	1	1	1
	90	-	. \$	5			•				(Males	-	31	24	12	4	H	-	-	-	1	-	-	-	-
Midiand	9	\$	2	2	=		-	-	-	:	Females.	31	22	œ	4	-	-	1	-	67	1	1	i	1	:
	9	8	•	•							(Males	Ŧ	11	12	7	Ð	10	00	-	1	1	i	1	1	- 0
Missaukee	8	8	70	0	#		-			-	Females	13	17	63	00	01	-	-	1	1	1	1	i	1	+
	8	900	Ş	8	;	9	0				(Males	10	134	73	41	21	10	1	02	1	i	23	00	93	-
Monroe	36	88	2	25	4	0	13		-	1	Females	8	137	46	10	6	10	10	60	00	i	-	1	- 1	+
	.00	91.9		8	9	,	*				(Males	60	16	75	30	17	16	11	6	9	60	1	63	4	+
Montcalm	102	717	2	8	4	R	0	-	-		Females	108	81	31	12	15	0	ic	61	*	1	-	1	1	-
				•			•			0	(Males	-	00	*	21111	1	67	64	1	1	-	i	1	1	· V
Montmorency.	9	-	-	*		20	-	-		1	Females	00	93	-	1	-	7			1	1	1	1	- 1	-
		-			5						(Males	00	154	141	62	27	20	+	in	-	00	-	1	1	1
Muskegon	124	LIO	4	8	7	1	-			-	Females	139	156	88	23	15	12	6	21	-	03	1	1	1	1
		***	8	3			-			3	(Males	00	88	45	67	14	4	10	00	93	1	-	1	- 1	1
Newaygo	168	108	200	4	2	20	-	-	- warne	-	Females	18	20	18	*	6	63	-	01	1	03		-	- 1	

	\$	900	9	9	8	•	•				Males	+	3	\$	27	16	12	1	9	9	03	24	_	-
Cartand	3	007	3	2	ğ	•	1	-	T	$\frac{z}{1}$	Females.	88	521	22	18	00	1	4	7	9	63	1	- 1	i
	9	3	7	;	;	•			7	<u> </u>	Males	60	3	9	12	00	4	*	93	00	03	-	-	i
Осевпа	3	5	4	=	=	q				$\frac{2}{1}$	Females	19	\$	19	4	9	61	4	9	+	-	1	1	i
	2	9	ŧ	2	M					5	Males	Ŧ	=	83	00	7	63	1	1	1	- 1	4	1	i
Ogemaw	3	9	3	=	•				1	2	Females	152	14	9	67	03	63	1	1	+	-	-	-	i
	Ş	•		e	٠			- 1		2	Males	-	7	4	10	-	1		İ	:	+	1	1	j
Ontonagon	2	•		-	4				-	$\frac{z}{1}$	Females	90	6	-	1		-	-	1	+	+	1	- 1	i
	9	2	\$	9	9		•				Males	60	47	41	22	-	63	+	-	-	+ 1	1	1	i
Osceola	8	8	3	8	97	0	•	1		$\frac{z}{1}$	Females	8	45	24	9	03	1	1	-	1	-	1	1	i
	9	o		M	•	•	•			7	Males		00	10	1	-	+	1	-	1	1	1	1	i
Oscoda	9	0		•	•	+	4			$\frac{z}{1}$	Females	6	89	93	-	Ì	-	-	-	+	-	- 1	1	i
	3	;	9	0	•		•			2	Males	00	21	12	4	63	Н	-	1	1	-	1	1	1
Otaego	\$	\$	2	0	4	*	9			$\frac{z}{1}$	Females	24	16	1	1	-	1	Ħ	1	- 1	-	1	-	1
	066	9	9	6	5					2	Males	00	76	88	30	п	00	+	00	10	-	97	1	i
Остама	800	9	ĝ.	5	4		-	-	1	$\frac{z}{1}$	Females	22	66	8	00	#	4	10	-	-	1	-		i
	60	۰	90	•	•					Ç	Males	-	==	=	+	63	1	-	-	-	1	1	1	1
resdue Isle	76	9	9	•	1	-		-		<u>-</u>	Females	30	9	67	1	1	1	-	1	1		1	1	i
	ţ	×	×	_	٠					5	Males	-	*	7	63	1	63	-	1	1	1	-	-	1
Koecommon	7	0	0	d	•					=	Females	Ħ	62	67	-	1	-	Н	1	1	1	1	- 1	j
	200	6	9	ŝ		;	•			2	Males	п	217	22	8	34	22	13	7	10	4	-	1	1
равливи	999	š	g.	3	:	1	•	-		$\frac{z}{z}$	Females.	202	282	7 0	42	15	00	7	00	10	2	1	1	- }
	766	97	-	Ē	3	G				5	Males	-	16	8	16	6	9	*	80	69	1	1	1	-1
Samuac	577	2	1	:	5	1				$\frac{z}{z}$	Females	88	8	12	9	00	-	10	-	1	_	1		×
	2	ç	ç	;	•	7	•			5	Males	1	14	22	12	99	1	1	i	-	-	1	i	1
Denoorerari	3	9	1	‡	•	•	•	-	-	$\frac{z}{z}$	Females	8	91	=======================================	9	-	1	1	1	1	-1	-	1	-1
	ŝ	8	9	S	9				T	5	Males	4	===	92	98	12	9	10	4	10	65	-	-	1
OHIR WASSES	9	9	3	3	3			-	-	=	Females	88	19	æ	13	10	n	6	03	00	-	_		-

TABLE 41.—Continued.—Marriages by Counties, Nativity, and Periods of Age.

	,beltri	-	Nativi	ty of I	Nativity of Persons Married 1888, Stated by Couples.	ns Marric Couples.	ied 188	8, Stat	ed by	1			Mar	Marriages at Different Ages, Stated in Periods of Years, 1888.	t Diff	erent /	Res, 8	tated	in Pe	riod	s of	lears	188	4
	sm səle	·u	.m.	eviten	-BII '8	Fen	Females Unknown,	Males Unknown.	ules own.		į													-
Counties.	fnoo ;	e-por	oq-už	ales, i	male s,	Ma	Males.	Fem	Females.	'UMO	Stated.									- 1				.70
	Number of 1888.	Both nativ	Both forelg	Foreign m.	Foreign fe	'evilen	Foreign.	.evilsi	Foreign,	Both unkn		Under 20.	50 to 52°	52 to 30.	30 to 32.	.04 of 68	40 to 45.	45 to 50,	.66 of 06	.09 of 66	.66 to 65,	.07 03 68	70 to 75.	75 to 80.
				1		,					(Males	*	151	149	99	81	18	6	9	-	1Å	63	01	-
St. Clair	442	88	9	9	2	23	20		-	-	Females	117	185	78	17	19	11	1	4	9	-	1	-	1
	1			- 1							(Males	1	20	88	22	9	10	1	00	+	60	+	1	-
St. Joseph	201	171	*	138	0	x 0				1	Females	52	88	24	13	1	7	00	-	+	1	1	1	+
			1								(Males	4	98	74	30	12	65	00	10	03	63	63	1	-
Tuscola	233	101	8	42	86	13	99				Females	88	85	28	9	00	YC.	62	62	-	00	-	1	1
	į		,		•	-		-			(Males	7	116	85	83	16	9	4	10	00	63	63	63	1
Van Buren	274	240	02	19	3 2	4	-	-		1	Females	100	66	33	11	13	7	-	99	-	64	1	-	1
	1			1	-	_					(Males	69	98	116	38	17	17	5	2	8	80	1	00	-
Washtenaw	312	321	3 '	20	13	0	19	1	-	1	Females	49	152	79	15	7	-	6	10	63	1	-	-	1
	1	i	1	-	8	•	,				(Males	15	969	723	259	101	63	45	33	10	00	10	00	-
Wayne	1,967	***	127	828	Sus	20	-			1	Females	435	930	377	8	98	88	21	10	6	1	-	1	-
	-		8	3							(Males	67	43	40	17	11		1	62	+	i	1	1	1
Wexford	116	8	8	E P	*	N				1	Females	47	#	11	60	10	-	1	-	-	1	1	1	1

MANNER OF UNION BY AGES.

The last column of Table 42 shows the proportion of males married at the different periods of age during the year 1888, and the bottom line of the table shows the proportion of females married at the same periods of age. The table may be explained as follows: the 310 males who were married under twenty years of age, as shown in the column next to the last, married 247 females aged under 20, 59 aged 20 to 25, and 4 aged 25 to 30; in like manner read each, number in the column headed "Total Males."

The 5,489 females who were married under 20 years of age, as seen in the second line from the bottom, 247 married males under 20, 3,120 married males 20 to 25, 1,640 married males 25 to 30, etc., down to one who married a groom 65 to 70. In a similar manner the other numbers in the line of "Total Females" are distributed throughout the table.

The period in which the largest number of males were married was 20 to 25, the number being 6,445, or 37.40 per cent of the total number at all ages. The largest number of females was married at the same period of age, being 6,952 or 40.34 per cent. These percentages are larger in 1888 than were those for 1887.

TABLE 42.—Exhibiting the Number of each Sex, at each Period of Age, Married during the year 1888, and the Per Cent of Brides and of Bridegrooms at each Period of Age to Total at all ages.

					Ages	of F	'ema	les, 1	888.								grooms
Ages of Males, 1888.	Under 20.	20 to 26.	25 to 30,	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 and over.	Unknown,	Total males.	Per cent of gr at each age,
Under 20	247	59	4													310	1.80
20 to 25	3,120	2,930	826	51	8	5	1								4	6,445	37.40
25 to 30	1,640	2,746	1,084	159	34	6	2	1							8	5,680	32.96
30 to 35	341	813	597	258;	71	23	4	2							2	2,106	12.22
85 to 40	101	259	262	157	130	32	14	5	1			1				962	5.58
40 to 45	24	94	128	109	111	86	25	6	6							589	2.10
45 to 50	10	29	50	67	64	73	46	13	4	2	1				2	361	3.42
50 to 55	3	12	22	33	45	42	51	29	13	3	1					254	1.47
55 to 60	1	5	4	10	24	29	36	41	23	9	1					183	1.07
60 to 65	1	2	4	6	9	19	22	28	20	15	5					131	.76
65 to 70	1	2	3	1	10	10	11	17	27	16	8	3				109	.63
70 to 75	*****	1	2	3	1	2	6	9	13	12	9	4			12-2	62	.36
75 to 80						2	3	9	4	4	3	1	2	,		28	.16
80 and over									1		1	3	1		****	6	.03
Unknown	*****		***			-01									7	.7	.04
Total females	5,489	6,952	2,486	849	507	329	221	160	112	61	29	12	3		23	17,233	
Per cent of brides at each age	31.85	40.84	14.43	4.93	2.94	1.91	1.28	.93	.65	.35	.17	.07	.02		.13		100.00

DISPARITY OF AGE.

As in previous years, the returns of marriages for 1888 show that considerable disparity of age was not considered a hindrance to marriage by many who were matrimonially inclined. It is only possible to mention a few cases here, but those who desire to examine into such matters may do so by reference to Table 42. Among the more remarkable of these marriages may be mentioned a groom of 68 to a bride of 21, which was solemnized in Barry county; a groom of 65 to a bride of 19 in Kent county, a groom of 66 to a bride of 22 in Macomb county.

On the other hand there were quite a number of marriages where the bride was many years older than the groom. Of these the most note-worthy differences in the ages, were a groom of 46 to a bride of 60 in Newaygo county; and a groom of 22 to a bride of 46 in Wayne county.

In Table 43 may be seen the number of marriages in each county for the year 1888, together with the marriage-rates, or number of marriages per 100 of the population in 1884. By removing the decimal one place to the right it shows the number of marriages per 1,000 living.

TABLE 43.—Exhibiting, by Counties, the number of Marriages in Michigan for the years 1886-1887, and 1888; the number as first returned, and the number returned since first Compilation for the years 1886 and 1887; the number of Inhabitants in 1884, and the Per Cent of Marriages in 1888 to Population in 1884.

			1	darriage	95.			d by	in 1884 to	1888 to
		1886.			1887.		1888.	esente	ts in 18	8
State and Counties.	Number as first re- turned and com- piled.	Number returned since first compl- lation.	Number returned previous to April 13, 1889.	Number as first re- turned and com- piled.	Number returned since first compi- lation,	Number returned previous to April 13, 1889.	Number returned.	Population 1884, represented by marriages in 1888.	Number of inhabitants one marriage in 1888.	Per cent of marriages population in 1884.
State	16,631	27	16,658	17,050	122	17,172	17,283	1,852,460	107	.98
Alcona	27		27	26		26	25	4,028	161	.62
Alger	4		4	3	1	4	9	a		
Allegan	372		372	339	1	340	319	38,666	121	.88
Alpena	118		118	164		164	137	12,683	98	1.08
Antrim	88		83	68		68	78	8,761	112	.89
Arenac	28		28	32	2	34	32	4,027	126	.79
Baraga	15		15	15		15	28	8,039	109	.92
Barry	200	5	205	169		169	206	24,102	117	.85
Bay	358		358	384	4	338	447	51,221	115	.87
Benzie	81		31	31		81	25	4,389	176	.57
Berrien	602		602	548	2	545	376	37,776	100	1.00
Branch	279		279	273		273	242	27,661	114	.87
Calhoun	312		312	349		349	323	41,585	129	.78
Cass	285		235	215		215	172	21,202	123	.81
Charlevoix	41		41	74		74	88	9,275	105	.95
Cheboygan	86		86	79		79	93	9,946	107	.94
Chippewa	89		89	96		96	106	8,422	79	1.26
Clare	46		46	58		58	68	5,549	82	1.23
Clinton	214	2	216	210		210	229	27,135	118	.84
Crawford	16		16	25		25	30	2,389	80	1.26
Delta	100		100	127	1	128	149	9,992	67	1.49
Eaton	280	1	281	269		269	266	31,802	120	.84
Emmet	52		52	58		58	72	7,944	110	.91
Genesee	349		349	338		338	326	38,776	119	.84
Gladwin	15		15	28		23	18	1,539	86	1.17

a Organized since census was taken.

TABLE 43.—Continued.—Marriages, Corrected by Counties.

~			N	farriage	8,			d by	3 2	98 to
		1886.			1887.		1888.	represented 38.	ts in 1884	8 in 1888
Counties.	Number as first re- turned and com- piled,	Number returned since first compi- lation,	Number return ed previous to April 13, 1889.	Number as first re- turned and com- piled.	Number returned since first compi- lation,	Number returned previous to April 13, 1889.	Number returned.	Population 1884, rep marriages in 1888,	Number of inhabitants one marriage in 1888.	Per cent of marriages population in 1884.
Gogebic				99		99	121	b		
Grand Traverse	96		96	125	2	127	120	12,092	101	.99
Gratiot	209		209	214		214	238	25,049	105	.95
Hillsdale	298		298	349		349	283	31,686	112	.89
Houghton	251		251	257		257	331	26,146	79	1.27
Huron	140	3	143	156	1	157	169	24,521	145	.69
Ingham	317		817	338	6	344	334	34,969	105	.96
Ionia	266	2	268	282	1	283	272	32,559	120	.84
Iosco	102	1	103	139	2	141	123	10,602	86	1.16
Iron	16		16	13		13	36	b		
Isabella	159		159	154	1	155	146	16,011	110	.91
Jackson.	339		339	802		302	337	45,232	134	.75
Kalamazoo	320	-	320	416	2	418	374	35,281	94	1.06
Kalkaska	25		25	44	Lane S	44	52	4,493	86	1.16
Kent	1,002		1,002	919		919	1,048	84,600	81	1.24
Keweenaw	7		7	9		9	14	4,667	333	.30
Lake	39		39	40	1	41	69	7,539	109	.92
Lapeer	224		224	211		211	247	30,057	122	.82
Leelanaw	87		37	39		39	58	7,128	123	.81
Lenawee	514	2	516	468	2	465	349	49,584	142	.70
Livingston	171	15.2	171	168	4	172	167	21,568	129	.77
Luce				6	3	9	26	b		
Mackinac	42		42	51		51	64	5,171	81	1.24
Macomb	250		250	213		213	251	31,293	125	.80
Manistee	221		221	196	1	197	222	19,875	90	1.12
Manitou a	2		2	5		5	- 50	20,010	-	0.00
Marquette	216		216	329	8	332	345	31,397	91	1.10
Mason	111		111	114		114	127	13,221	104	.96
Mecosta	187		187	157		157	190	20,597	108	.92
Menominee	200	8	208	244	19	263	243	19,120	79	1.27
Midland	84	3	84	69	10	69	76	8,776	115	.87
Missaukee	22		22	22		22	38	3,386	89	1.12
Monroe	361		361	318		318	300	33,353	111	.90

a No returns from county clerk. b Organized since census was taken.

MARRIAGES—COUNTY MARRIAGE RATES.

TABLE 43.—Continued.—Marriages, Corrected by Counties.

			ı	A arriage	8.			d by	1884 to	1888 to
		1886.			1887.		1888.	represented 88.	s	=
Counties.	Number as first re- turned and com- piled.	Number return ed since first compi- lation.	Number returned previous to April 13, 1889.	Number as first re- turned and com- piled,	Number return ed since first compl- lation,	Number returned previous to April 13, 1889.	Number returned,	Population, 1884 rep marriages in 1888.	Number of inhabitants one mariage in 1888,	Per cent of marriages population in 1884.
Montealm	308	1	309	249	5	254	264	35,356	134	.71
Montmorency	6		6	6		6	16	845	53	1.89
Muskegon	314		314	364	1	365	427	37,554	88	1.1
Newaygo	150		150	140		140	168	18,996	113	.86
Oakland	315		315	325	3	328	320	41,100	128	.78
Oceana	106		106	122		122	135	14,519	108	.93
Ogemaw	42		42	38		38	52	3,637	70	1.4
Ontonagon	34		34	24		24	13	4,836	372	.2
Osceola	142		142	142		142	128	14,001	109	.9:
Oscoda	6		6	25	2	27	18	1,374	76	1.3
Otsego	23		23	23		23	44	3,906	89	1.13
Ottawa	300		300	298	1	299	229	36,225	158	.63
Presque Isle	20		20	40		40	32	4,064	127	.79
Roscommon	9		9	12		12	17	2,588	152	.66
Saginaw	646		646	636		636	635	74,795	118	.8
Sanilac	208		208	201		201	224	29,583	132	.76
Schoolcraft	39		39	46		46	58	5,846	73	1.3
Shiawassee	212		212	231	2	233	276	28,078	102	.90
St. Clair	397		397	466		466	445	46,783	105	.93
St. Joseph	338		338	271		271	201	26,277	131	.76
Tuscola	281	2	283	276	3	279	233	30,726	132	.76
Van Buren	286		286	274		274	274	30,341	111	.90
Washtenaw	377		377	332	25	357	312	41,694	134	.78
Wayne	1,781		1,781	2,009	21	2,039	1,967	188,966	96	1.0
Wexford	111		111	126		126	116	10,518	91	1.13

DIVORCES IN MICHIGAN.

In the following tabular exhibit, which was published in the report for 1887, may be seen the number of marriages in Michigan, the number of divorces and the ratio of divorces to marriages, for the years 1871–1886. These statistics of divorces in Michigan are taken from the Report of the Commissioner of Labor, Carroll D. Wright, made to Congress in February, 1889.

Years.	Number of Marriages.	Number of Divorces.	Ratio of Divorces to Marriages,
1871	10,181	680	1 to 16.2
1872	9,882	620	1 to 15,9
1873	10,572	705	1 to 15.0
1874	11,041	794	1 to 18,9
1875	11,055	864	1 to 12.8
1876	10,858	800	1 to 18.6
1877	11,009	927	1 to 11.9
1878	12,221	993	1 to 12.8
1879	18,225	1,110	1 to 11.9
1880	14,149	1,149	1 to 12.3
1881	14,847	1,313	1 to 11.8
1882	16,178	1,385	1 to 12.1
1888	16,420	1,383	1 to 11.9
1884	15,002	1,289	1 to 12.1
1885	15,016	1,227	1 to 12.2
1886	16,631	1,339	1 to 12.4
1887	17,050		· · · · · · · · · · · · · · · · · · ·
Average	13,255	1,027	1 to 12.9

The above statistics concerning the number of divorces in Michigan show the remarkable fact that one divorce is granted in this State to about twelve marriages solemnized. The increase has been rapid and constant, the number running from 449 in 1867 to 1,339 in 1886. As the tendency of later legislation in this State seems rather to restrict than to extend the facilities for securing divorce, this growth can hardly be accounted for in this way. The increase in divorces is very much greater than the increase in population, as may be seen from the following figures taken from the report above referred to.

The increase in the population of the United States between the census years 1870 to 1880 was 30.1 per cent, while the divorces for the same time increased 79.4 per cent. In our own State the increase in population between the above years was 38.2 per cent, while the percentage of increase in the number of divorces was 107.4 per, cent. These facts offer opportunities for instructive study in the subject of social science.

DEATHS, 1888.

The total number of deaths recorded in Michigan in 1888 was 21,764, a number greater by 2,282 than that returned in 1887. It exceeds the average annual mortality for the ten years, 1878–1887, by 4,942 and is the greatest number registered in any year since the beginning of registration in the State. This increase would naturally lead to the conclusion that there was an unsatisfactory state of the public health in Michigan in 1888. It rather means a more perfect registration in some parts of the State, and more especially in the city of Detroit. The number of deaths reported from Wayne county in 1887 was 3,543; in 1888 this number was increased to 5,301, a difference of 1,758, which is nearly as much as the entire increase for the State. When the causes of the deaths in 1888 are considered, which is done on subsequent pages, it would be found that this increase in the number of deaths is not due to any unusual prevalence of destructive diseases, but rather to a more perfect registration.

The following tabular statement shows the death-rate in Michigan, both as regards the number returned and the number corrected for omissions in the enumeration.

	Inhabitants in 1884 represented	Deaths	Deaths Corrected	Per cent of Death	s to Inhabitants.
	by Deaths in 1888.	as Returned.	for Omissions in Enumerating.	Deaths as Returned.	Deaths Corrected for Omissions,
Totals	1,845,778	21,764	26,043	1.18	1.41

The population, according to the State census of 1884, represented by the returns of deaths for 1888, was 1,845,778, and the ratio of deaths to population was 11.8 per 1,000. Corrected for omissions in the enumeration the number of deaths occurring in 1888 was estimated at 26,043, and the death-rate 14.1 to 1,000 living.

Because of the imperfections in the method of securing the statistics of deaths, it is impossible to form a correct idea of the death-rate in the State. Compared with other States having a sytsem of registration it is very low, and if correct would be an occasion for rejoicing that we are more highly favored than the people of other States. It would be an assumption on our part, however, to believe that superior public health would account for the great disparity between the death-rate in Michigan and that of Massachusetts. The death-rate in that State, which has a more accurate system of registration than any other, for the year 1888 was 20.59 per thousand of the estimated population, and its average death-rate for the period of thirty-eight years, 1851–1888, was 19.48. In New Hampshire the death-rate is more than 18 per thousand, and in Rhode Island the annual death-rate exceeds 16 in every thousand. While these New England States have a larger population to a given territory than has Michigan, and a

large number of the people are subjected to dangers to health arising from factory life, still we must admit that the death-rate in this State would be larger if a better system of registration was adopted.

The following statistics, taken from the Registration Report of Massachusetts for 1888, show the death-rates in some of the foreign countries, and are given here by way of comparison.

England and Wales	18.8	per	1,000.
Scotland	18.7	66	66
Ireland	18.3	66	44
Sweden	19.2	66	"
Austria	28.9	"	44
France	22.0	"	66
Switzerland	20.4	44	66
Norway	16.1	66	66

The average number of deaths for certain specified periods of time within the year 1888, as returned and as corrected for omissions in the enumeration, including those in unknown months, was as follows:

Periods of Time.	Deaths as Returned.	Corrected for Omissions.
Per quarter	5,441	6,511
Per month	1,814	2,170
Per week	419	501
Per day	60	71

The number of deaths by quarters, showing the influence of the seasons upon the mortality in Michigan for each of the years, 1886, 1887, 1888, and the average for ten years, 1878–1887, may be seen in Table 44. As compared with the average for ten years, the year 1888 shows a larger proportion for the first and second quarters and a smaller proportion for the third and fourth quarters. As in the other years of the table and the ten-year average, the largest mortality in 1888 occurred in the quarter ending with September, and the least number in the quarter ending with March. The order of the quarters beginning with the highest, was as follows: third, fourth, second, first, not only for 1888 but for each year and the average.

In the lower part of the table the returns of deaths are corrected for omissions, and it is seen that the third quarter still maintains its place as having the greatest proportion of deaths.

TABLE 44.—Deaths in Michigan by Quarters of the year, Exhibiting the Number and Per Cent of Totals as Returned and Corrected for the years 1886–1888, and the Average for Ten Years, 1878–1887.

	Totals and	18	96.	18	87.	18	88.	Averag Years, 1	e for 10 878–1887.
	Months with which Quarters end.	Num- ber,	Per Cent of Total.	Num- ber.	Per Cent of Total.	Num- ber,	Per Cent of Total,	Num- ber.	Per Cent of Total,
To	tals	18,187	100.00	19,482	100.00	21,764	100.00	16,822	100.00
	March	8,620	19.90	4,058	20.83	4,966	22.36	8,421	20.84
7	June	4,058	22.28	4,476	22.98	5,894	24.78	3,845	22.86
As Returned.	September	5,287	28.80	5,896	80.21	5,936	27.28	4,891	29.07
Æ	December	5,217	28.69	4,996	25.64	5,502	25.28	4,611	27.41
i	Unknown	60	.83	66	.84	66	.30	54	.32
Av	erage *	4,547	25.00	4,871	25.00	5,441	25.00	4,206	25.00
То	tals	25,210	100.00	27,251	100.00	28,048	100.00	24,484	100.00
	March	5,717	22.68	6,448	23.64	6,258	24.01	5,716	23.89
fons,	June	5,949	23.60	6,597	24.21	6,637	25.49	5,987	24.30
Corrected Omissions.	September	7,053	27.97	7,971	29.25	6,955	26.70	6,866	28.10
As 0	December	6,431	25.51	6,174	22.66	6,132	28.55	5,861	28.99
` ~	Unknown	60	.24	66	.24	66	.25	54	22
Αv	erage *	6,303	25.00	6,813	25.00	6,511	25.00	6,109	25.00

^{*}Including deaths in unknown month.

The mortality by months for the years 1886, 1887, 1888 and the average for ten years, 1878–1887, may be found in Table 45. It seems that the mortality of every month in 1888, except July, was greater than that of the corresponding month in 1887. The spring months, March, April and May show the greatest difference in mortality over those in 1887, the month of May leading with 386. As usual August had the largest number of deaths and January the least number. The excess of August over January was 753, or 3.46 per cent. In the ten-year average the excess of greatest over least month was 724, or 4.30 per cent.

TABLE 45.—Exhibiting, by Months, the number and Per Cent of Deaths Returned for the Years 1886-1888, and the Average for Ten Years 1878-1887, the Months, in order of greatest first.

		1886.			1887.			1888.			ge for 10 1878-1887	
	Year and Months.	Numb'r.	Per Cent of Total,	Year and Months.	Numb'r.	Per Cent of Total.	Year and Months.	Numb'r.	Per Cent of Total.	Year and Months,	Numb'r.	Per Cent of Total,
Order.	Year	18,187	100.00	Year	19,482	100.00	Year	21,764	100.00	Year	16,822	100.00
1	Sept.	1,889	10.39	Aug	2,055	10.55	Aug	2,169	9.97	Aug	1,738	10.33
2	Aug	1,887	10.37	Sept	1,916	9.83	Dec	2,012	9.24	Sept	1,712	10.18
8	Dec	1,841	10.12	July	1,915	9.83	Sept	1,978	9.09	Dec	1,619	9.62
4	Oct	1,761	9.68	Dec	1,743	8.95	Apr	1,909	8.77	Oct	1,549	9.21
5	Nov	1,615	8.88	Oct	1,699	8.72	Mar	1,865	,8.57	Nov	1,443	8.58
6	Mar	1,462	8.04	Apr	1,599	8.21	Мау	1,858	8.54	July	1,441	8.57
7	July	1,461	8.03	Nov	1,554	7.98	Oct	1,848	8.49	Apr	1,358	8.07
8	Apr	1,396	7.68	Mar	1,585	7.87	July	1,789	8.22	May	1,313	7.80
9	May	1,376	7.57	Мау	1,472	7.56	Nov	1,642	7.54	Mar	1,309	7.78
10	June	1,281	7.04	June	1,405	7.21	June	1,627	7.48	June .	1,174	6.98
11	Feb	1,093	6.01	Feb	1,274	6.54	Feb	1,585	7.28	Feb	1,098	6.58
12	Jan	1,065	5.86	Jan	1,249	6.41	Jan	1,416	6.51	Jan	1,014	6.08
	Unk	60	.83	Unk	66	.34	Unk	66	.30	Unk.	54	.32
	Av	1,516	8.88	Av	1,624	8.33	Av	1,814	8.33	Av	1,402	8.88

SEX OF DECEDENTS.

Table 46 shows the mortality of males and females in Michigan for a period of four-teen years, 1875–1888, and the average for these years. In 1888, the deaths of males exceed the deaths of females by 1,698; they were in the proportion of 117 deaths of males to every 100 deaths of females, or 54 males and 46 females in each 100 decedents. It will be noticed that each year the male decedents exceed the female decedents, the average for the fourteen years being 115 males to 100 females. When the excess of males in the population is considered it accounts in a great measure for this excess of mortality among males and somewhat modifies the inference that might be drawn from the above figures. The death-rate among males, the number of deaths to each thousand living in 1884, was 12.09 that among females was 11.45.

TABLE 46.—Number and Per Cent of Deaths of Males and Females Returned in Michigan for the years 1875-1888. (Unknown sex excluded.)

	Males d.	males	of Males deaths of es.	Per cent of each sex to total of both sexes.					
Years.	of true	Deaths of Females as returned,	Deaths of to 100 deat Females.	Males.	Females.	Excess of the sexes.			
	Deaths as reti	Deatl	Death to 1 Fen		2 01111100	Males.	Females.		
1875	6,448	5,484	117.6	54.04	45.96	8.08			
1876	6,756	5,761	117.3	53.97	46.03	7.94			
1877	6,827	6,040	113.0	53.06	46.94	6.12			
1878	6,632	6,082	109.0	52.16	47.84	4.32			
1879	7,522	6,848	109.8	52.34	47.66	4.68			
1880	8,645	7,410	116.7	58.85	46.15	7.70			
1881	10,263	8,910	115.2	53,53	46.47	7.06			
1882	8,713	7,664	113.7	53.20	46.80	6.40			
1883	9,101	7,748	117.5	54.02	45.98	8.04			
1884	9,589	8,385	114.4	53.35	46.65	6.70			
1885	9,025	7,569	119.2	54.89	45.61	8.78			
1896	9,725	8,402	115.7	58.65	46.35	7.30			
1887	10,563	8,877	119.0	54.34	45.66	8.68			
1888	11,722	10,024	116.9	53.90	46.10	7.80			
Average	8,681	7,515	115.4	58.56	46.44	7.12			

OMISSIONS IN THE ENUMERATION OF DEATHS.

Applying the method of correction, used in previous reports, for omissions in the enumeration because of the long time elapsing between the occurrence of the deaths and their enumeration, it is found to be necessary to increase the number of deaths returned for 1888 by about 20 per cent in order to obtain the number of deaths which probably occurred, according to that evidence. It is probable that the actual death-rate was greater than given in Table 47, because based upon an assumed relation between the numbers for December, 1887, and January, 1888, and any unusual death-rate in either of those months would have a great influence upon the correction. The small death-rate for December, 1887, as compared with that for other years, makes the number to be added smaller for 1888.

The order of the months in Table 47 is changed from that of Table 45 because it is thought that the omissions bear a direct relation to the time between the occurrence of the deaths and their enumeration, and that the per cent to be added to each month should be more or less as the time is longer or shorter.

TABLE 47.—Exhibiting by Months the Number and Per Cent of Deaths, as corrected
for omissions in the enumeration, for the years 1886-1888, and the Average for ten
years, 1878–1887, months arranged in order by number, greatest first.

	1886.				1887.			1888.		Average for 10 Years, 1878-1887.			
	Months.	Numb'r.	Per Cent of Total,	Months.	Numb'r.	Per Cent of Total.	Months.	Numb'r.	Per Cent of Total.	Months,	Numb'r.	Per Cent of Total,	
Order.	Total_	25,210	100.00	Total	27,251	100.00	Total	26,043	100.00	Total	24,484	100.00	
1	Aug	2,547	10.10	Aug	2,783	10.21	Aug	2,548	9.77	Aug	2,444	10,00	
2	Sept	2,477	9.82	July	2,669	9.79	Apr	2,384	9.15	Sept	2,830	9.54	
8	Mar	2,258	8.96	Sept	2,519	9.24	Mar	2,364	9.08	Apr	2,153	8.81	
4	Oct	2,240	8.89	Apr	2,417	8.87	Мау	2,284	8.77	Mar	2,135	8.74	
5	Dec	2,199	8.72	Mar	2,381	8.74	Sept	2,281	8.76	July	2,092	8.56	
6	Apr	2,102	8.34	May	2,167	7.95	Dec	2,205	8.47	Oct	2,089	8.84	
7	July	2,029	8.05	Oct	2,167	7.95	July	2,131	8.18	Мау	2,027	8.30	
8	Мау	2,018	8.00	Dec	2,086	7.66	Oct	2,096	8.05	Dec	1,996	8.18	
9	Nov	1,992	7.90	Jan	2,096	7.47	Feb	2,040	7.83	Feb	1,841	7.53	
10	June	1,829	7.25	Feb	2,026	7.44	June	1,969	7.56	Nov	1,836	7.52	
11	Feb	1,731	6.87	June	2,013	7.39	Jan	1,849	7.10	June .	1,757	7.19	
12	Jan	1,728	6.86	Nov	1,921	7.05	Nov	1,831	7.08	Jan	1,740	7.12	
	Unk	60	.24	Unk	66	.24	Unk	66	.25	Unk	54	.22	
	Av. a	2,101	8.83	Av. a	2,271	8.83	Av	2,170	8.33	Av. a.	2,036	8.83	

^{*} Including deaths in unknown month.

AGES OF PERSONS WHO DIED IN MICHIGAN IN 1888.

The relation of age and sex to mortality is shown in Tables 48 and 49. It appears that of all the deaths returned in 1888, 27.49 per cent, more than a fourth, were those of infants under one year of age, and 38.96 per cent were those of young children under five years of age. Such a large proportion of infant-mortality affects the general mortality-rate at all ages very largely. As compared with the year 1887, and the average in Table 49, the percentage of deaths under one year of age in 1888, was more than in 1887, and also more than the average. The percentage of deaths under 5 was more than that of 1887, but less than the average for the twelve years, 1877–1888.

The proportion of males and females among the decedents at different ages is also shown in Table 48. In infancy and childhood the deaths of males largely predominate, corresponding with the excess of males among the births. At ages from ten to forty, the ratio is reversed, and the deaths of females exceed those of males, the ratio at the period from twenty to thirty being 9.80 per cent greater for females.

In Massachusetts the percentage of deaths under one year of age in 1888, was only 21.07, and that of deaths under 5 was 32.09. As compared with the percentages of those in our own State, they are much lower, and seem to indicate a higher rate of infant-mortality in Michigan.

The percentage of deaths between 20 and 30 was slightly less in 1888 than in 1887, and also less than the average. As may be seen, nearly nine per cent of the total deaths are contributed at these ages.

TABLE 48.—Exhibiting, by Sex, and by Age in Periods of Years the number and Proportion of Persons returned as having Died in Michigan during the Year 1888.

Ages in Years and Periods.	Number of Deaths, 1888.				Per Cent of Deaths at each Age to Total at all Ages,			Per Cent of each Sex to Total of Both Sexes,				Excess of the Sexes by Number,		nales.
										Exc	ess,			Males to 100 females.
	Totals.	Males,	Females.	Unknown,	Totals,	Males.	Females.	Males.	Females.	Males.	Females.	Males,	Females.	
All ages	21,764	11,722	10,024	18	100,00	100.00	100.00	58.90	46.10	7.80		1,694		117
Under 1	5,983	3,399	2,567	17	27.49	29.00	25.61	56.97	43.03	13.94		832		132
1 to 2	1,149	613	536		5.28	5.23	5.35	53.35	46.65	6.70		77		114
2 to 3	585	308	276	1	2.69	2,63	2.75	52.74	47.26	5.48		32		112
3 to 4	461	_226	235		2.12	1.93	2.34	49.02	50.98		1.96		9	96
4 to 5	302	153	149		1.39	1.31	1.49	50.66	49.34	1.32	****	4		103
All under 5	8,480	4,699	3,763	18	38.96	40.09	37.54	55.53	44.47	11.06	*****	936		125
5 to 10	881	454	427		4.05	3.87	4.26	51.58	48.47	3.06	*****	27		105
10 to 15	565	267	298		2.60	2.28	2.97	47.26	52.74		5.48		31	90
15 to 20	832	402	430		3.82	3.43	4.29	48.32	51.68		3.30		28	98
20 to 25	969	455	514		4.45	3.88	5.13	46,96	53.04		6.08		59	89
25 to 30	885	426	459		4.07	3.63	4.58	48.14	51.86		3.72		33	93
30 to 35	694	336	358		3.19	2.87	3.57	48,41	51.59		3.18		22	94
85 to 40	780	381	399		3.58	3,25	3.98	48.85	51.15		2.30		18	95
40 to 45	679	353	326		3.12	3.01	3.25	51.99	48.01	3.98	*****	27		108
45 to 50	659	385	274		3.03	3.28	2.74	58.42	41.58	16.84		11		141
50 to 55	666	356	310		3.06	3.04	3.09	53.45	46.55	6.90		46		118
55 to 60	698	376	322		3.21	3.21	8.21	53,87	46.13	7.74		54		117
60 to 65	841	486	355		3.86	4.15	3.54	57.79	42.21	15.58		131		137
65 to 70	952	550	402		4.37	4.69	4.01	57.77	42,23	15.54		148		137
70 to 75	947	543	404		4.35	4.63	4.03	57.34	42.66	14.68		139		134
75 to 80	889	506	383		4.09	4.32	3.82	56.92	43.08	13.84		123		132
80 to 85	591	312	279	,	2.72	2.66	2.78	52.79	47.21	5.58		33		119
85 to 90	337	192	145		1.55	1.64	1.45	56.97	43,03	13.94		47	2444	132
90 to 95	90	44	46		.41	.87	.46	48.89	51.11		2,22		2	96
95 to 100	21	14	7		.10	.12	.07	66.67	33.33	33.84		7		200
100 and over	3	1	2		.01	.01	.02	33,33	66.67		33.34		1	50
Unknown ages	305	184	121	Go	1.40	1.57	1.21	60.33	39.67	20.66		63		152

TABLE 49.—Exhibiting the Per Cent of Deaths at Different Ages, for the Years 1877-1888, and Average for the Twelve Years.

Years.	Under 1 Year.	Under 5 Years.	20 to 80.	All others.
1877	26.11	40.30	8.68	51.02
1878	25.22	89.22	8.43	52.35
1879	24.68	39.52	8.23	52.25
1880	24.66	89.95	7.96	52.09
1981	24.20	40.63	9.00	50.87
1882	24.38	38.81	8.72	52.47
1888	24.83	38.26	9.37	52.87
1884	27.22	40.05	9.08	50.87
1885	26.10	37.61	8.93	53.44
1886	26.22	38.79	8.80	52.41
1887	25.39	37.94	8.84	58.22
1888	27.49	38.96	8.52	52.5 2
Average	25.54	39.17	8.72	52.11

The following tabular exhibit is prepared in order to show the number of deaths at certain periods of age with the number of persons living at the same periods, according to the last census. It is thus seen that the death-rate is much larger for infants under one year of age than for children under five, being nearly three times greater in 1888. In 1887, the per cents were 9.98 and 3.27, respectively.

	Under 1 year.	Under 5 years.	20 to 30.	All others.
Deaths, 1888.	5,988	8,480	1,854	11,430
Population, 1884	49,574	225,973	353,394	1,274,291
Per cent of deaths to Population	12.07	3.75	.52	.90

DEATHS BY MONTHS AT DIFFERENT AGES.

The evidence set forth in Table 50 is valuable in showing the influence of seasons upon the mortality among persons at different periods of age. According to the statistics here presented, the three months of July, August and September were the most fatal to children under one and also to children under five years of age. The proportion of deaths of those under one to deaths of those at all ages was greater in August than in any other month of the year. This is also true of those under five years of age. The summer diseases of children, cholera infantum, diarrhea, and dysentery, contribute largely to this increased death-rate during the midsummer season.

In 1888, the largest proportion of decedents between the ages of 5 and 10 years occurred in the month of October, December being second in order; of persons between the ages of 10 and 20, the largest proportion occurred in the month of October, May being second; of those between the ages of 20 to 50 the largest proportion was in December, closely followed by the months of March, April and May; while for those 50 and over, the largest proportion was in March with the months of April and December close at hand.

The teaching of this table appears to be that the months of July and August are most dangerous to children under five years of age, and that to older children and adults the fall and winter months are more dangerous to life. The spring months of 1888 appear to have been more than usually fatal.

Tables 51 and 52 give further details concerning deaths by sex, by months, and periods of age.

TABLE 50.—The relation of the Deaths at different Periods of Age to Deaths at All Ages, by Months: and for the same Period of Age, the relation of the Deaths in each month to the Deaths in the Year 1888.

Dootho	Don'the he Ares in Dariode of Venns	Year						Months, 1888.	, 1888.					
Todati		1888,a	Jan.	Feb.	March,	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
All Ages	*	21,698	1,416	1,585	1,865	1,909	1,858	1,627	1,789	2,169	1,978	1,848	1,642	2,012
	Number	5,970	337	380	419	430	480	454	909	851	658	432	404	524
Under 1	Per cent of all ages	27.51	23.80	23.97	22.47	22.52	25.83	27.90	33.87	39.23	33.01	28.87	24.61	26.04
	Per cent of deaths, 1888.	100.00	5.64	6.37	7.03	7.20	8.04	7.60	10.15	14.25	10.94	7.24	6.77	8.78
	(Number	8,465	518	292	611	655	969	641	821	1,121	988	019	285	732
All under 5	Per cent of all ages	39.01	36.57	35.46	33.76	34.31	37.46	39.40	45.89	51,68	44.79	34,63	35,44	36,38
	Per cent of deaths, 1888	100.00	6.12	6.64	7.22	7.73	8.33	7.57	9.70	13.24	10.47	7.56	6.88	8.65
	Number	880	57	69	18	88	22	74	28	63	65	107	76	28
5 to 10	Per cent of all ages	4.06	4.03	4.85	4.66	4.35	2.85	4.55	3.24	2.90	87.58	5.79	4.63	4,87
	Per cent of doaths, 1888	100.00	6.48	7.81	68'6	9.43	6.03	8.41	6.59	7.16	7.38	12,16	8,64	10.00
	Number	1,894	38	102	113	118	132	104	108	121	109	151	119	125
i0 to 20	Per cent of all ages	6.43	6.29	6.44	90.9	6.18	7.10	6.39	6.04	3.58	5.51	8,83	7.25	6.21
	Per cent of deaths, 1888	100.00	6.38	7.33	8.11	8,47	9.47	7.46	7.74	89.8	7.82	11.05	8.54	8.96
	Number -	4,657	313	353	443	444	420	339	355	388	369	400	380	419
20 to 50	Per cent of all ages	21.46	22.11	22.27	23.75	23,26	22.61	20.84	19.84	17.66	18.66	22.13	23.14	22.32
	Per cent of deaths, 1888	100.00	6.72	7.58	9.51	9.54	9.03	7.28	7.62	8.23	7.92	8.78	8,16	9.61
	Number	6,017	418	473	280	581	589	448	425	420	532	210	467	281
50 and over	Per cent of all ages	27.73	29.52	29.84	31.64	30.43	29.01	27.53	23.76	20.75	26.90	27.60	28.44	29.03
	Per cent of deaths, 1888.	100.00	6.95	7.86	18.6	9.66	8.96	7.45	7.06	7.48	8.81	8.47	7.76	9.71
	Number	285	21	38	21	28	18	21	22	31	17	88	18	35
Unknown ages	Per cent of all ages	1.31	1.48	1.64	1.18	1.47	.97	1.29	1.38	1.43	88	1.52	1.10	1.69
	Per cent of deaths, 1888	100.00	78.7	9.12	7.37	9.82	6.32	7.37	7.73	10.88	5.96	9.82	6.32	11.93

a Excluding unknown month.

TABLE 51.—Exhibiting by Sex and by Age in Periods of years, the Number of Persons Returned, as having died in Michigan during the Year 1888.

								M	onth	s, 188	38.				
Ages in Periods of Years.	Sex.	Year, 1888.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
All ages	Totals	21,764 11,722 10,024 18	1416 752 661 3	1585 830 752 3	1865 998 866 1	1909 991 916 2	1858 1011 846 1	100	1789 941 846 2	2169 1156 1013	1072	1848 1004 844		2012 1099 911 2	66 38 26 2
Under 1	Totals	5,983 3,399 2,567	337 183 151 3	380 228 149 3	419 248 171	430 229 199 2	480 277 202 1	454 264 190	606 315 289 2	851 494 357	653 372 280 1	432 234 198	404 232 171 1	524 316 206 2	13 7 4 2
All under 5	Totals	8,480 4,699 8,763 18	518 278 287 3	562 322 237 3	611 359 251 1	655 351 302 2	696 384 311 1	641 363 278	821 424 395 2	1121 641 480	886 478 407	640 351 289	582 820 261 1	732 419 311 2	15 9 4 2
5 to 10	Totals Males Females	881 454 427	57 30 27	69 34 35	87 44 43	83 42 41	53 28 25	74 44 30	58 24 34	63 31 32	65 36 29	107 56 51	76 38 38	88 46 42	1
10 to 15	Totals	565 267 298	41 16 25	41 17 24	38 15 23	50 22 28	52 29 23	39 15 24	45 24 21	48 19 29	37 21 16	69 32 35	51 31 20	52 23 29	1 1
15 to 20	Males	402 430	48 22 26	61 28 33	75 34 41	68 31 37	80 80 50	65 41 24	63 33 30	73 30 43	72 32 40	85 44 41	68 36 32	73 41 32	1
20 to 25	Totals	969 455 514 885	27 17 68	79 39 40 63	88 37 51 85	92 35 57 81	86 39 47 80	50 33 56	69 28 41 80	80 32 48 80	86 40 46 57	88 37 51 78	82 41 41 70	89 48 41 85	2 1 2
25 to 30	MalesFemales	426 459 694	35 33 48	31 32 45	40 45 62	30 51 59	37 43 65	28 28 54	43 87 61	39 41 59	29 28 65	47 31 60	32 38 49	35 50 64	2
90 to 35	Males	336 358	28 20	22 23	30 32	24 35	30 35	29 25	27 34	24 35	33 32	33 27	26 23	29 35	2

TABLE 51.—Continued.—Deaths by Periods of Age, by Sex, by Month.

								Mo	onth	8, 18	88.				
Ages in Periods of Years.	Sex.	Year, 1888.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
	Totals	780	54	70	76	72	69	50	51	75	58	68	68	69	
85 to 40	Males	381	17	34	39	36	41	25	25	35	31	35	36	27	
	Females	899	37	36	37	86	28	25	26	40	27	83	32	42	
	Totals	679	48	50	69	77	62	51	38	58	49	48	57	76	1
40 to 45	≺ Males	853	24	-24	34	89	38	28	25	21	25	23	30	41	1
	Females	826	24	26	85	3 8	24	23	13	32	24	25	27	85	
	Totals	659	51	46	63	63	58	45	56	36	54	67	54	66	
45 to 50	Males	385	81	19	44	85	35	35	36	21	29	31	34	35	
	Females	274	20	27	19	28	23	10	20	15	25	36	20	81	
	Totals	666	44	63	47	71	69	44	40	56	49	69	45	67	2
50 to 55	Males	356	24	27	22	3 8	41	2 8	19	30	25	88	24	44	1
	Females	310	20	36	25	88	28	16	21	26	24	36	21	28	1
	Totals	69 8	60	49	58	58	78	57	55	55	67	50	49	67	
55 to 60	 Males	376	85	21	29	34	87	85	32	33	31	26	25	38	
	Females	822	25	28	29	24	36	22	23	22	36	24	24	29	
	Totals	841	59	59	78	80	65	64	66	68	76	80	76	67	8
60 to 65	√ Males	486	29	32	46	51	42	37	42	31	43	49	46	36	2
	Females	855	80	27	32	29	23	27	24	37	33	81	30	81	1
	Totals	952	62	78	95	93	79	69	63	75	85	69	72	109	8
65 to 70	Males	550	29	45	48	49	51	39	33	48	52	48	43	64	1
	Females	402	33	33	47	44	28	30	80	27	88	21	29	45	2
	Totals	947	60	62	108	99	76	74	61	70	84	84	75	92	2
70 to 75	Males	548	84	82	58	61	39	42	80	41	58	47	46	54	1
	Females	404	26	30	50	38	37	32	81	29	26	87	29	38	1
	Totals	889	56	71	97	81	80	75	60	58	77	71	64	101	8
75 to 80	Males	506	80	37	51	45	44	47	34	80	47	45	40	55	1
	Females	883	26	34	46	36	36	28	26	28	30	26	24	46	2
	Totals	591	58	55	58	49	51	42	51	33	55	46	49	46	8
80 to 85	Males	812	81	29	33	24	28	17	80	13	34	25	22	23	8
	Females	279	22	26	25	25	23	25	21	20	21	21	27	23	
	Totals	337	18	26	37	42	85	15	22	30	29	29	27	25	2
85 to 90	Males	192	13	13	21	22	23	8	15	18	15	17	11	15	1
	Females	145	5	18	16	20	12	7	7	12	14	12	16	10	1
	(Totals	90	5	8	10	7	9	8	5	9	7	8	8	8	
90 to 95	Males	44	4	5	6	4	8	4	4	2	8	4	2	3	
	Females	46	1	8	4	8	6	2	1	7	4	4	8	5	

DEATHS-BY SEX, BY AGE, BY MONTHS.

TABLE 51.—Continued.—Deaths by Periods of Age, by Sex, by Month.

			-	•				M	onth	s, 1 8	88.				
Ages in Periods of Years.	Sex.	Year, 1888.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	18 34	December.	Unknown.
	Totals	21	1	1	2	1	1	2	2	1	3	4	1	2	
95 to 100	Males	14	1	1	1	1	1	2	2		1	2	1	1	
	Females	7			1					1	2	2		1	
	Totals	3		1			1						1		
100 and over	≺ Males	1					1								5
	Females	2		1									1		
	Totals	305	21	26	21	28	18	21	22	31	17	28	18	34	20
1	 Males	184	14	18	7	17	10	15	11	17	9	17	14	22	13
Unknown	Females	121	7	8	14	11	8	6	11	14	8	11	4	12	7

TABLE 52.—Exhibiting, by Sex, and by Months, the Number returned as having Died in Michigan during the Year 1888, at each and every Age, the Age stated in Twelfths of a Year, for those under One Year, and in Years for those over One Year of Age.

	•							Mor	ths,	1888					_
Ages in Years.	Sex.	Year, 1888.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
	Totals	2,796	197	208	218	235	242	213	229	293	226	210	225	293	7
	Males	1,651	103	123	131	120	145	130	132	187	143	118	132	184	3
Under 1-12	Females	1,128	91	82	87	118	96	83	95	106	82	92	92	107	2
	Unknown	17	3	8		2	1		2		, 1		1	2	2
	Totals	458	21	24	37	36	89	28	47	66	60	31	33	36	
1-12	Males	245	14	17	25	17	18	14	19	37	29	17	19	19	
	Females	213	7	7	12	19	21	14	28	29	31	14	14	17	
	(Totals	429	21	20	23	32	36	37	42	57	51	34	33	42	1
2-12	Males	225	12	14	11	19	24	19	19	29	27	16	15	19	1
	Females	204	9	6	12	18	12	18	23	28	24	18	18	23	
	(Totals	879	18	17	17	23	32	28	54	63	45	32	25	25	
8-12	≺ Males	214	14	6	9	13	19	16	30	37	28	15	11	16	
	Females	165	4	11	8	10	13	12	24	26	17	17	14	9	
	(Totals	815	13	16	20	15	28	23	38	72	47	19	9	19	1
4-12	Males	155	8	4	6	10	7	11	21	89	24	8	6	11	
	Females	160	5	12	14	5	16	12	17	33	23	11	3	8	1
	Totals	290	14	15	19	15	13	17	36	56	52	12	21	18	2
5-12	Males	164	8	11	12	7	8	11	16	28	31	5	12	14	1
·	Females	126	6	4	7	8	5	6	20	28	21	7	9	4	1
	(Totals	267	5	16	10	8	13	18	40	56	48	18	12	22	1
6-12	Males	149	4	10	5	7	9	10	18	32	22	10	7	14	1
	Females	118	1	6	5	1	4	8	22	24	26	8	5	8	
	(Totals	218	4	14	13	15	10	17	22	47	30	20	8	18	
7-12	Males	137	1	11	11	10	6	12	10	27	18	12	7	12	
	Females	81	8	3	2	5	4	5	12	20	12	8	1	6	
	Totals	241	13	12	19	13	25	18	28	39	30	19	12	18	
8-12	Males	137	4	7	12	6	14	5	18	24	17	9	9	12	
	Females	104	9	5	7	7	11	8	10	15	13	10	3	6	
	Totals	252	14	16	24	11	21	27	36	40	14	22	12	14	1
9-12	Males	143	9	8	14	7	8	17	23	22	5	, 15	7	7	1
	Females	109	5	8	10	4	13	10	13	18	g	. 7	5	7	

TABLE 52.—Continued.—Deaths by Ages, by Sex, by Months.

	J2.—CONTIN	· 	1							1888					
Ages in Years.	Sex.	Year, 1888.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October,	November.	December.	Unknown,
10-12	Totals Males Females	173 93 80	10 4 6	9 8 1	9 8 1	8 6 2	15 11 4	20 13 7	22 6 16	34 14 20	23 13 10	4 2 2	10 5 5	9 8 6	
11-12	Totals Males Females	165 86 79	7 2 5	13 9 4	10 4 6	19 7 12	11 8 3	13 6 7	12 8 9	28 18 10	27 15 12	11 7 4	4 2 2	10 5 5	
1	Totals Males Females	1,149 618 586	75 40 35	76 47 29	75 46 29	101 53 48 52	110 58 52 45	82 46 36 37	101 49 52 52	150 82 68 55	130 60 70 49	93 49 44 54	73 33 40 56	82 49 33 53	1
2	Totals Males Females Unknown	585 308 276	36 19 17	51 24 27	45 27 17 1	29 23	20 25	20	27 25	33 22	24 25	31 23	30 26	24 29	
3	Totals Males Females	461 226 235	37 16 21	33 14 19	44 28 21	46 27 19	30 13 17	42 22 20	39 19 20	40 19 21	34 14 20	39 20 19	27 12 15	50 27 23	
4	Totals Males Females	302 153 149	33 20 13	22 9 13	28 15 13	26 13 13	31 16 15	26 11 15	23 14 9	25 13 12	20 8 12	22 17 5	22 13 9	23 3 20	1 1
5	Totals Males Females (Totals	257 138 119 180	13 9 4 12	19 14 5 12	32 15 17 15	33 14 19 15	17 8 9 8	21 17 4 20	13 3 10 11	15 5 10 13	19 10 9 12	23 14 9 23	26 15 11 20	26 14 12 19	
6	Males Females	96 84 162	5 7 11	5 7 16	.8 7 18	9 6 15	5 3 8	11 9 11	7 4 10	6 7 8	5 7 14	15 8 20	11 9 14	9 10 17	
7	Males Females	79 83 139	4 7 10	9 7 12	12 6 8	8 7 8	3 5 11	4 7 11	3 7 12	6 2 13	8 6 10	9 11 21	5 9 6	8 9 17	
8	Females	73 66 143	5 5 11	5 7 10	8 5 14	4 4 12	6 5 9	6 5 11	7 5 12	8 5 14	6 4 10	10 11 20	3 3 10	10 7 9	1
9	Females	68 75 117	7 4 8	1 9 10	6 8 10	5 12	6 3 12	6 5 7	8 6	8 8	3 7	12 19	6 11	5 4 7	
10	Males Females	63 54	4	3 7	6 4	6	5	3 4	1	6	6	10	2	3	

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TABLE 52.—Continued.—Deaths by Ages, by Sex, by Months.

								Mon	ths,	1888.					
Ages in Years.	Sex.	Year, 1888.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December,	Unknown.
	Totals	111	5	8	7	6	14	11	8	9	9	16	9	9	
11	Males	57	2	8	3	5	8	4	5	3	4	9	6	5	
•	Females	54	3	5	4	1	6	7	3	6	5	7	3	4	
	Totals	93	4	9	7	10	7	6	8	8	4	11	7	11	1
12	Males	46	3	6	8	5	5	2	3	2	1	4	6	6	
	Females	47	1	3	4	5	2	4	5	6	8	7	1	5	1
	Totals	107	7	4	8	11	7	7	14	9	7	12	14	11	1
13	Males	47	2	2		3	3	3	9	6	4	5	6	3	1
	Females	60	5	2	3	8	4	4	5	8	8	7	8	8	
	Totals	137	17	10	11	11	12	8	9	14	10	11	10	14	
14	Males	54	5	8	3	8	6	3	2	6	6	7	4	6	
	Females	83	12	7	8	8	6	5	7	8	4	4	6	8	
	Totals	131	7	13	5	14	11	19	11	16	9	8	10	8	
15	Males	61	8	5	1	8	4	11	6	5	4	5	5	4	
	Females	70	4	8	4	6	7	8	5	11	5	8	5	4	
	Totals	133	7	11	20	12	13	10	9	12	8	11	5	15	
16	Males	64	3	5	8	4	6	8	7	5	5	4	1	7	
	Females	69	4	6	11	8	7	2	2	7	8	7	4	8	
	Totals	181	9	8	20	17	21	11	10	15	19	18	13	19	1
17	- Males	87	5	4	10	7	7	7	5	7	7	9	8	11	
	Females	94	4	4	10	10	14	4	5	8	12	9	5	8	, 1
	Totals	177	18	11	12	8	14	14	12	15	17	80	15	16	
18	√ Males	91	4	3	5	5	6	8	5	11	7	18	11	8	
	Females	86	9	.8	7	3	8	6	7	4	10	12	4	8	
	Totals	210	12	18	18	17	21	11	21	15	19	18	25	15	
19	Males	99	7	11	9	7	7	7	10	2	9	8	11	11	
•	Females	111	5	7	9	10	14	4	11	13	10	10	14	4	
	Totals	195	13	13	14	23	16	11	11	15	22	17	22	18	
20	∦ Males	98	6	6	8	8	8	6	5	7	10	3	13	13	
· .	Females	102	7	7	6	15	8	5	6	8	12	14	9	5	
	Totals	194	12	14	15	18	18	15	16	13	17	21	18	17	
21	∦ Males	106	9	9	9	8	12	9	8	8	9	10	9	11	
	Females	88	3	5	6	10	6	6	8	10	8	11	9	в	
	Totals	194	11	15	19	16	21	14	28	17	18	14	10	19	2
22	Males	86	7	5	6	7	8	9	9	8	4	4	6	11	2
	Females	108	4	10	18	9	13	5	14	9	9	10	4	8	

 ${\bf TABLE~52.-Continued.--} Deaths~by~Ages,~by~Sex,~by~Months.$

								Mon	ths,	1888.					
Ages in Years.	Sex.	Year, 1888.	January.	February.	March.	April,	May.	June.	July.	August,	September.	October.	November.	December,	Unknown.
	(Totals	184	4	14	17	18	17	19	12	23	12	18	15	15	
23	Males	75	3	5	3	6	7	13	3	11	4	10	5	5	
	Females	109	1	9	14	12	10	6	9	12	8	8	10	10	
	Totals	202	4	23	28	17	14	24	7	12	22	18	17	20	1
24	Males	95	2	14	11	6	4	13	3	3	13	10	8	8	5
	Females	107	2	9	12	11	10	11	4	9	9	8	9	12	1
	(Totals	155	12	13	10	14	17	5	12	12	10	20	16	13	1
25	Males	82	4	8	5	9	7	3	8	3	4	14	11	6	
	Females	73	8	5	5	5	10	2	4	9	6	6	5	7	1
	Totals	193	13	18	17	15	22	17	19	13	14	18	9	18	2
26	Males	102	8	9	11	6	10	11	8	9	7	12	4	7	
	Females	91	5	9	6	9	12	6	11	4	7	6	5	11	
	(Totals	176	10	10	25	16	9	11	15	22	12	17	13	16	
27	Males	75	5	5	9	3	5	4	5	11	8	10	4	6	
***************************************	Females	101	5	5	16	13	4	7	10	11	4	7	9	10	
	(Totals	209	17	10	17	24	21	13	24	18	12	13	17	22	1
28	Males	101	9	4	8	6	9	7	15	11	5	8	8	11	
	Females	108	8	6	9	18	12	6	9	7	7	5	9	11	1
	(Totals	152	16	12	16	12	11	10	10	15	9	10	15	16	1
29	Males	66	9	5	7	6	6	3	7	5	5	3	5	5	
4	Females	86	7	7	9	6	5	7	3	10	4	7	10	11	
	(Totals	144	6	6	9	13	18	7	12	18	20	16	13	4	2
80	Males	74	4	4	4	4	9	6	8	9	7	9	7	2	1
0V	Females	70	2	2	5	9	9	1	100	9	13	7	6	2	,
	Totals		0	8	100	200		12	4	8	9	12	12	12	
01	Males	142	11	3	18	11	16	7.5	13	15	10	1	100		
31		59	9	16	8	3	7	8	3	3	5	8	5	4	
	Females	83	5	5	10	8	9	4	10	5	4	4	7	8	7079
00	Totals	160	10	13	14	13	11	15	16	15	16	12	12	13	
32	Males	87	6	8	8	8	6	6	11	5	9	7	8	5	****
	Females	73	4	5	6	. 5	5	9	5	10	7	5	4	8	
	Totals	118	13	7	9	9	12	11	9	8	8	9	6	16	1
88.	Males	56	10	4	4	3	5	6	1	4	-5	3	8	8	
	Females	62	3	3	5	6	7	5	8	4	3	6	3	8	1
	Totals	130	8	11	12	13	8	9	11	10	12	11	6	19	
84	Males	60	6	3	6	6	3	3	4	3	7	6	3	10	
	Females	70	2	8	6	7	5	8	7	7	5	5	3	9	

TABLE 52.—Continued.—Deaths by Ages, by Sex, by Months.

		T						Mon	ths,	1888					
Ages in Years.	Sex,	Year, 1888.	January.	February.	March.	April.	May.	June.	July.	Angast.	September.	October.	November.	December.	Unknown.
	[Totals	179	8	16	19	19	13	11	11	18	16	13	15	20	
35	Males	96	4	9	8	11	8	4	9	10	9	7	6	11	
	Females	83	4	7	11	8	5	7	2	8	7	6	9	9	
	(Totals	152	12	11	19	16	13	11	12	15	7	10	13	13	
96	Males	69	4	7	9	9	8	4	5	2	3	7	7	4	
Non-security of the second	Females	83	8	4	10	7	5	7	7	13	4	3	6	9	
	(Totals	152	15	12	15	7	12	14	11	17	14	10	10	15	
7	Males	76	3	6	10	3	9	8	3	10	6	5	8	5	
	Females	76	12	6	5	4	3	6	8	7	8	5	2	10	
	(Totals	162	11	16	14	13	19	10	14	9	13	16	15	12	
8	Males	71	3	6	7	4	10	6	5	5	7	8	6	4	
~	Females	91	8	10	7	9	9	4	9	4	6	8	9	8	
	(Totals	135	8	15	9	17	12	4	3	16	8	19	15	9	
9	Males	69	3	6	5	9	6	3	3	8	6	8	9	3	
***************************************	Females	66	5	9	4	8	6	1		8	2	11	6	6	
	(Totals	153	8	14	11	13	15	12	6	10	13	12	16	22	-
10	Males	78	3	5	5	8	8	5	2	3	8	6	12	12	
	Females	75	5	9	6	5	7	7	4	7	5	6	4	10	1
	(Totals	117	10	6	14	19	14	5	5	8	5	11	7	13	
	Males	64	6	3	8	9	9		3	.4	1	7	7	7	
ч	Females	11 31	100	3	6	11.50	5		2				100	100	
	T. 20	53	4	1	1	10		5	1.3	4	4	4	10	6 20	
	Totals	139	9	11	16	12	7	10	11	12	10	8	13	-	
12	Males	66	4	4	8	3	5	7	9	4	4	6	4	8	
	Females	73	5	7	8	9	2	3	2	8	6	2	9	12	
	Totals	133	8	12	17	15	8	13	6	12	12	10	10	10	
13	Males	69	5	7	9	9	5	8	4	5	6	2	2	7	
	Females	64	3	5	8	6	3	5	2	7	6	8	8	3	
	Totals	137	13	7	11	18	18	11	10	11	9	7	11	11	
4	Males	76	6	5	4	10	11	8	7	5	6	2	5	7	
	Females	61	7	2	7	8	7	3	3	6	3	5	6	4	
	Totals	145	12	11	13	14	12	10	8	6	17	13	15	14	
15	Males	82	6	7	8	9	7	7	7	2	8	6	8	7	
	Females	63	6	4	5	5	5	3	1	4	9	7	7	7	
	Totals	117	8	11	7	8	12	9	6	10	5	13	10	18	
46	Males	66	8	5	5	3	6	6	3	3	4	6	9	8	
	Females	51		. 6	2	5	6	3	3	7	1	7	1	10	

DEATHS-BY AGES, BY SEX, BY MONTHS.

TABLE 52.—Continued.—Deaths by Ages, by Sex, by Months.

	·							Mon	ths,	1888.					
Ages in Years.	Sex.	Year, 1888.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
,	Totals	138	14	7	15	16	13	6	15	7	 8	14	7.	16	
47	Males	81	10	4	10	9	9	4	8	6	3	9	4	5	
	Females	57	4	8	5	7	4	2	7	1	5	5	8	11	
	Totals	145	12	12	10	16	12	13	16	10	8	16	13	7	
48	Males	86	5	3	8	8	7	12	10	7	5	7	7	7	
	Females	59	7	9	2	8	5	1	6	8	3	9	6		
	Totals	` 114	5	5	18	9	9	7	11	3	16	11	9	11	
49	Males	70	2		13	6	6	6	8	3	9	8	6	8	
	Females	44	3	5	5	8	8	1	3		7	8	3	3	
	Totals	137	7	18	12	12	11	6	8	6	11	21	10	15	
50	Males	61	5	7	8	4	8	4	3	2	5	9	8	. 8	
	Females	76	2	11	9	8	8	2	5	4	6	12	7	7	
	Totals	102	7	8	7	12	10	9	3	8	11	9	11	7	
51	Males	48	4	4	8	7	6	7		5	3	2	3	4	
	Females	54	3	4	4	5	4	2	3	8	8	7	8	3	
	Totals	162	15	14	9	18	16	14	13	16	12	12	7	16	
52	Males	99	9	9	4	11	7	9	6	11	8	7	7	11	
	Females	63	6	5	5	7	9	5	7	5	4	5		5	
	Totals	111	7	8	10	7	12	3	8	15	7	9	9	15	1
58	≺ Males	58	5	2	4	3	7	1	7	5	3	2	5	9	
	Females	58	2	6	6	4	5	2	1	10	4	7	4	6	1
	Totals	154	8	15	9	22	20	12	8	11	8	18	8	14	1
54	{ Males	95	1	5	8	13	13	7	3	7	6	13	6	12	1
	Females	59	7	10	1	9	7	5	5	4	2	5	2	2	
	Totals	144	11	6	13	ġ.	17	12	5	15	15	14	8	20	
55	Males	79	7	2	6	4	9	11	4	12	7	6	3	8	
	Females	65	4	4	7	4	8	1	1	8	8	8	5	12	
	Totals	160	17	12	11	16	13	9	19	8	12	12	17	14	
56	Males	86	8	5	5	10	7	4	12	4	4	5	11	11	
	Females	74	9	7	6	6	6	5	7	4	8	7	6	3	
	Totals	124	10	15	14	9	13	7	11	9	11	11	6	8	
57	Males	72	8	7	7	7	7	2	7	5	7	8	4	3	
	Females	52	2	8	7	2	6	5	4	4	4	8	2	5	
	Totals	137	10	7	10	9	17	15	10	13	14	8	9	15	
58	Males	73	6	8	5	8	10	10	1	7	6	5	5	9	
	Females	64	4	4	5	6	7	5	6	6	8	8	4	6	

TABLE 52.—Continued.—Deaths by Ages, by Sex, by Months.

								Mon	ths,	1888.					
Ages in Years.	Sex.	Year, 1888.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
	Totals	133	12	9	10	16	13	14	10	10	15	5	9	10	
9	Males	66	6	4	6	10	4	8	5	5	7	2	2	7	
	Females	67	6	5	4	6	9	6	5	5	8	3	7	3	
	(Totals	179	17	15	16	20	15	11	15	8	10	20	20	11	1
0	Males	102	7	6	10	13	5	6	9	5	6	13	15	6	1
	Females	77	10	9	6	7	10	5	6	3	4	7	5	5	
	(Totals	132	7	11	7	14	13	12	14	13	11	16	6	8	
1	Males	77	2	8	3	10	10	9	9	7	4	8	2	5	
	Females	55	5	3	4	4	3	3	5	6	7	8	4	3	
	(Totals	188	13	12	17	18	17	15	13	13	18	14	16	21	1
2	Males	113	7	5	10	13	14	9	6	7	9	8	11	13	18
P	Females	75	6	7	7	5	3	6	7	6	9	6	5	8	
	(Totals	158	7	15	19	13	13	8	10	16	19	17	12	9	1
3	Males	89	2	9	11	7	7	3	7	7	1	(40)	8	10	1
3	Females				8	100			1		11	13	1 18	4	
	C	69	5	6	1	6	6	5	3	9	8	4	4	5	
	Totals	184	15	6	19	15	7	18	14	18	18	13	22	18	
	Males	105	11	4	12	8	6	10	11	5	13	7	10	8	
	Females	79	4	2	7	7	1	8	3	13	5	6	12	10	
	Totals	211	14	20	19	21	17	16	11	21	23	14	13	22	
5	Males	124	7	10	11	11	10	7	5	14	12	11	8	18	
	Females	87	7	10	8	10	7	9	6	7	11	3	5	4	
	Totals	. 144	8	15	13	10	16	13	15	15	11	8	7	12	
6	Males	91	3	9	6	5	11	9	10	10	7	5	6	10	
	Females	53	6	6	7	5	5	4	5	5	4	3	1	2	
	Totals	191	15	17	21	20	18	12	13	8	11	16	11	29	
7	Males	92	10	9	7	.7	9	6	6	4	4	10	8	12	
	Females	99	5	8	14	13	9	6	7	4	7	6	3	17	
	(Totals	198	15	13,	16	12	12	12	13	14	27	16	23	24	
8	Males	118	5	10	9	7	7	8	7	9	19	12	13	12	
	Females	80	10	3	7	5	5	4	6	5	8	4	10	12	
	Totals	208	9	13	26	30	16	16	11	17	13	15	18	22	
9	Males	125	4	7	15	19	14	9	5	11	10	10	8	12	
	Females	83	5	6	11	11	2	7	6	6	3	5	10	10	
	Totals	201	8	15	30	30	9	18	12	13	15	14	15	21	1
0	Males	109	6	6	13	19	4	9	8	5	10	7	9	12	
	Females	92	2	9	17	11	5	9	4	8	5	7	6	9	

DEATHS—BY AGES, BY SEX, BY MONTHS.

TABLE 52.—Continued.—Deaths by Ages, by Sex, by Months.

		91						Mor	iths,	1888	3.				
Ages in Years.	Sex.	Year, 1888.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
	(Totals	153	8	13	23	13	12	9	6	11	13	19	8	17	
71	Males	91	6	7	15	6	6	3	2	8	9	12	8	9	
	Females	62	2	6	8	7	6	6	4	8	4	7		8	
	Totals	221	16	8	19	12	24	20	21	17	23	25	20	16	
12	Males	127	7	4	9	7	15	12	10	7	16	17	11	12	
	Females	94	9	4	10	5	9	8	11	10	7	8	9	4	
	Totals	198	18	13	18	17	18	16	10	17	19	13	17	22	
13	Males	113	11	8	11	13	7	11	5	13	14	4	8	8	
	Females	85	7	5	7	4	11	5	5	4	5	9	9	14	
	(Totals	174	10	13	18	27	13	11	12	12	14	13	15	16	
4	Males	103	4	7	10	16	7	7	5	8	9	7	10	13	
	Females	71	6	6	8	11	6	4	7	4	5	6	5	3	
	(Totals	200	15	20	19	13	18	13	14	16	16	20	14	21	1 13
5	Males	119	8	8	10	9	8	7	8	9	14	12	8	17	16
	Females	81	7	12	9	4	10	6	6	7	2	8	6	4	
	(Totals	220	9	17	25	24	21	16	11	12	22	18	18	26	1
6	Males	129	5	13	13	13	14	10	5	7	14	12	13	10	
	Females	91	4	4	12	11	7	6	6	5	8	6	.5	16	1
	(Totals	166	16	13	21	13	16	15	8	7	14	10	14	19	
7	Males	93	11	8	9	8	8	8	6	6	7	7	8	7	
	Females	73	5	5	12	5	8	7	2	1	7	8	6	12	
	Totals	173	8	13	22	16	11	17	11	10	16	18	11	20	
8	Males	81	2	6	11	4	4	12	4	3	5	12	7	11	
	Females	92	6	7	11	12	7	5	7	7	11	- 6	4	9	
	(Totals	130	8	8	10	15	14	14	16	8	9	5	7	15	1
9	Males	84	4	- 2	8	11	10	10	11	5	7	2	4	10	
	Females	46	4	6	2	4	4	4	5	3	2	3	3	5	1 3
	Totals	131	13	13	9	7	7	7	10	7	16	10	17	15	
0	Males	68	7	6	6	3	3	2	9	1	9	7	8	7	
	Females	63	6	7	3	4	4	5	1	6	7	3	9	8	
	(Totals	129	17	12	11	12	14	9	12	7	8	9	10	8	
4	Males	76	13	9	6	6	8	3	7	4	6	5	6	3	
	Females	53	4	3	5	6	6	6	5	3	2	4	4	5	
	Totals	118	8	14	17	11	7	11	7	5	13	9	7	8	1
32	Males	59	3	9	7	6	3	5	3	3	9	5	1	4	1
	Females	59	5	5	10	5	4	6	4	2	4	4	6	4	

TABLE 52.—Continued.—Deaths by Ages, by Sex, by Months.

								Mor	the,	1888					
Ages in Years.	Sex,	Year, 1888.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
	(Totals	103	8	8	7	8	8	7	9	9	10	9	9	9	2
83	Males	50	4	1	8	3	5	3	6	3	5	5	4	6	1
	Females	58	4	7	4	5	3	4	3	6	5	4	5	3	
	Totals	110	7	8	14	11	15	8	13	5	8	9	6	6	
84	Males	59	4	4	11	6	9	4	5	2	5	3	3	3	
	Females	51	3	4	3	5	6	4	8	3	3	6	3	9	
	Totals	92	9	7	16	9	6	2	4	5	13	8	6	6	1
85	Males	51	6	3	11	3	4	1	3	3	8	4	2	3	
	Females	41	3	4	5	6	2	1	1	2	5	4	4	8	1
	(Totals	63	1	6	7	6	10	5	2	9	4		10	3	
98	Males	35	1	5	3	4	6	2	1	5	3		4	1	
	Females	28	13	1	4	2	4	3	1	4	1		6	2	
19	(Totals	74	4	8	6	12	5	1	5	6	5	9	5	7	,
97	Males	49	3	4	5	7	5	1	3	6	2	7	2	3	1
.,	Females	25	1	4	1	5	1		2	U	3	2	3	4	
	(Totals	72	3	4	6	12	10	6	6	5	3	8	3	6	
88	Males	40	3	*	2	5	7	4	5	3	1	3	1	6	
	Females	32		4	4	7	3	2	1	2	2	5	2		****
9.1				1	2		4	-	18				3		
	Totals	36	1		2	3		1	5	5	4	4	-	3	
89		17		1		3	1		3	1	1	3	2	2	
	Females	19	1		2		3	1	2	4	3	1	1	1	****
	Totals	32	3	1	8	1	3	2	3	4	3	2	4	3	
90	Males	16	3	1	2		1	1	3	1	1	1	1	1	
	Females	16		****	1	1	2	1		3	2	1	3	2	
0	Totals	25		3	1	8	2		2	3	1	6	8	1	****
01	Males	12		3	1	2	1		1	1		3			
	Females	13			****	1	1	نص	1	2	1	3	3	1	
	Totals	14		2	3	1	1	3		1	1			2	
2	Males	9			2	1	1	2			1	****		2	
	Females	5		2	1			1		1					
	Totals	7	1			2	1			1	1			1	
98	Males	2	1	****		1		****							
	Females	5				1	1			1	1			1	
	Totals	12	1	2	3		2	.1			1		1	1	
4	Males	5		1	1			1			1		1		
	Females	7	1	1	2		2			.3				1	

DEATHS—BY AGES, BY SEX, BY MONTHS.

TABLE 52.—Continued.—Deaths by Ages, by Sex, by Months.

								Mor	ths,	1888					
Ages in Years.	Sex.	Year, 1888,	Januáry.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
	(Totals	1												1	
95	Males	1												1	
	Females														
	Totals	- 1									1				
98	Males														
	Females	1									1				
	(Totals	6				1		1	2		1			1	
97	Males	4				1		1	2						
	Females	2									1			1	
	(Totals	8	1	1	2		1	1				2			
98	Males	6	1	1	1		1	1				1			
	Females	2			1							1			
	Total	5								1	1	2	1		
99	Males	3	1								1	1	1		
	Females	2								1		1			
	(Totals	3		1			1						1		
100 and over	Males	1					1								
2.2.2.3.0.2.0.0.0.0.0.0.0.0.0.0.0.0.0.0.	Females	2		1									1		
	(Totals	305	21	26	21	28	18	21	22	31	17	28	18	34	20
Unknown	Males	184	14	18	7	17	10	15	11	17	9	17	14	22	18
War and A section of the section of	Females	121	7	8	14	11	8	6	11	14	8	11	4	12	7

INFANT MORTALITY.

More still-births were returned for the year 1888 than for any previous year since the begining of registration, the number being 1,358. This is 461 more than the number returned in 1887 and 520 more than the average annual number returned for the ten years 1878–1887. As shown in Table 53, the per cent of still-births to total deaths was more in 1888 than for any other year of the table and also more than the average.

TABLE 53.—The relation of Still-births to all Deaths as returned for the Years 1886-1888, and the Average for ten years 1878-1887, Corrected by Means of the Returns of Births.

	Tot	al Deaths ar	nd Still-bir	ths.
	1886.	1887.	1888.	Average for 10 Years, 1878–1887.
All deaths.	18,187	19,482	21,764	16,822
Number of still-births	909	897	1,358	838
Per cent of still-births to total deaths	5.00	4.60	6.24	4.98

RELATIONS OF DEATHS OF CHILDREN UNDER ONE TO BIRTHS.

The great mortality each year among children under one year of age makes the subject one of very great interest and importance. Tables 54, 55 and 56 have been devised for the purpose of showing the influence of different seasons upon the lives of young children. When it is considered that the probabilities of life are so much greater after the age of one year, the problem, how to guard against the dangers of the first year of life, becomes one for the most serious consideration.

Table 55 contains evidence concerning the number of children who were born in each month of the year 1887, and who died in 1887 and 1888 aged under one year. The greatest number of deaths under one year of age, according to the returns, occurred among children born in the month of April. The least mortality was among those born in the month of January. The table also shows the ratio of deaths under one year by sex. Of the 24,002 male children who were born in 1887, 2,863 or 11.93 per cent of them died before the age of one year. Of the 22,101 females born in 1887, 2,209 or 10 per cent of them died before their first birthday. The excess of the males over the females was 654, or 1.93 per cent. These percentages correspond very nearly with the average for the ten years, 1878–1887, the total being 10.89, males 11.93, and females 9.80. The average annual excess of males is thus seen to be a little over two per cent.

The first column of figures at the left of table 56 shows the number of children born in 1887, and in each month of that year, who died before reaching the age of one year. The first diagonal column shows that a very large proportion of the children die during the month of birth, or under one month old. Of the 382 children born in January, 1887, who died under one year of age, 129 died in January, the month of birth, 31 died in February, 35 died in March, and 16 died in April, etc. In like manner may be traced the deaths of children born in each month of the year 1887. It appears that of the 5,072 children born in 1887 who died under one year of age, 2,154 or 42.47 per cent of them died under the age of one month, 429 lived to the age of two months, 372 lived to the age of three months, etc. The last column in the table shows what per cent of the children born in each month of the year 1887, died during the month of birth. As seen from the figures, nearly 5 per cent of the children died during the month of birth.

• . .

		5,955
	2,563	
1,098		
1,093		
122	38	165
154	88	178
41 52 64 76 70 95 162 203 154	142	251
791	137	241
8	137	218
2	148 137 118 81	998
16	163	888
2	128	314
200	214	879
4	224 214 155 204 165 159	88
22	252	828
	1,648	5,955 2,774 458 428 879 814 288 266 218 241 251 178
1,093		
Totals	Males Females	Totals
roar.	All Aged	Year.

Excluding 7 males and 4 females, month of death unknown; and 17 deaths of persons of unknown sex,—28 in all.

			·	
			·	
-				

-		
1,093		
155	88	165
162 203 154 155	808	173
3 208	2160 100	1 251
2 162	168 148 137 137 125 118 81 104	3.24
41 52 64 76 70 95	818	318
22	##	366
92	168	288
6	214 155 165 159	314
22	214	378
4	1,648 245 224 1,126 218 204	428
22	245	458
1	1,648	2,774 458 428 379 314 288 966 218 241 251 173 165
1,093		5,955
Totals	Males Females	Totals
	pai	
Year.	All Aged	Year,

Excluding 7 males and 4 females, month of death unknown; and 17 deaths of persons of unknown sex.—28 in all.

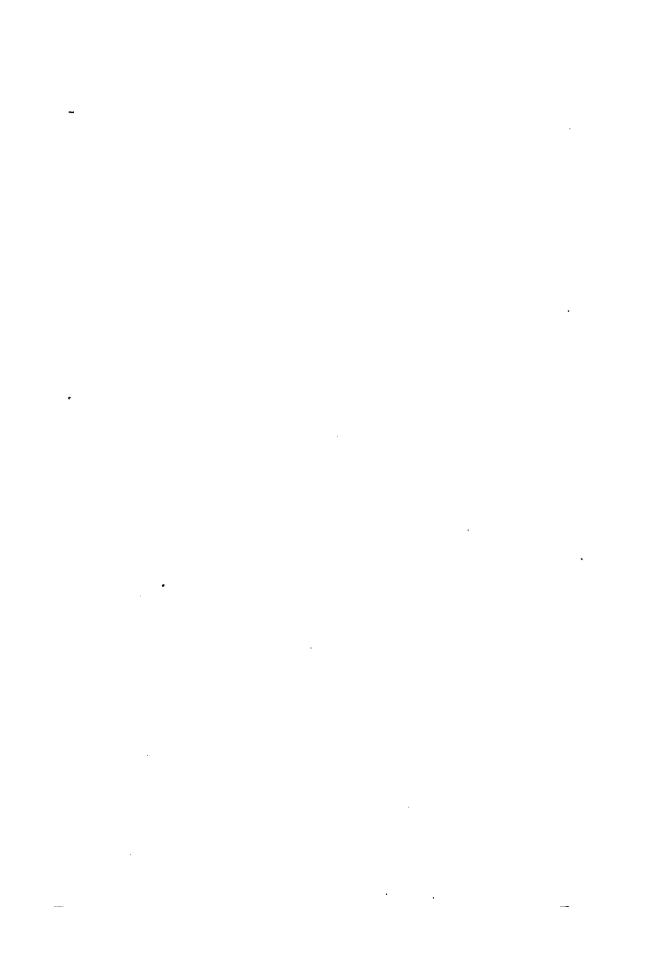


TABLE 55.- Of the Children Born in 1887, the Number who Died during the Year 1887, the Number who Died during the Year 1888, under One Year of Age, and the Per Cent of Decedents under One Year to Children born in 1887, according to the Returns.

Births. in 1887, in 1887, in 1887, in 1887, in 1887, in 1887, in 1887, in 1887, in 1887, in 1887, in 1887, in 1887, in 1887, in 1887, in 1887, in 1887, in 1887, in 1887, in 1888, in 1				Born	Born in 1887.		Births		Males Born in 1887.	rn in 188	7.	Birthaof	F	Females Born in 1887.	forn in 10	
46,166 8,979 1,088 5,072 10,99 24,002 2,245 618 2,863 11,98 3,182 382 12,20 1,683 198 2,246 14,50 3,150 409 7 416 13,21 1,655 238 2 240 14,50 8,987 458 23 476 11,94 2,100 236 21 289 11,50 8,986 452 33 456 12,45 1,901 286 21 289 11,64 8,966 374 57 431 10,88 2,028 209 27 286 11,64 4,011 385 77 462 11,49 2,074 214 51 286 10,68 4,286 314 109 423 9,22 2,207 177 59 236 10,68 4,381 236 316 4,03 4,03 4,03 2,02 2,220 177	Months of Births.	Births in 1887, as Return'd.	Died during the year 1887.	year during the	Total died aged un- der I year,		of Males, 1887, as Returned.	Died during the year 1887.	year during the	Total died aged un- der I year,		Females, 1887, as Returned.	Died during the year 1887.	Died aged under I year during the year 1888.	Total died aged un- der I year.	Per cent of deaths under I to births,
8,182 882 12.20 1,635 198 2 40 8,967 4,58 28 4,76 11,94 2,100 236 13 248 8,966 4,52 38 4,65 12,45 1,991 288 21 289 8,966 452 38 4,85 12,45 1,991 268 21 289 8,666 374 57 4,31 10,88 2,034 209 27 236 4,011 385 77 462 11,49 2,074 214 51 265 4,286 314 109 428 9,02 2,290 177 59 236 4,286 314 22 388 8,96 2,219 127 36 36 4,381 235 155 388 8,96 2,219 127 36 36 4,066 214 205 419 11,18 1,973 127 112 239 4,068 207 419 11,18 1,973 127 110 231 4,066 214 205 419 11,18 1,973 127 112 239 4,066 21	Totals a	46,166	8,979	1,093	5,073	10.99	24,002	2,245	618	2,863	11.93	22,101	1,734	475	2,209	10.00
3,150 406 7 416 13,21 1,655 238 2 240 3,967 458 28 476 11,94 2,100 235 13 248 3,966 452 38 485 12,45 1,901 286 21 289 3,966 874 57 431 10.88 2,028 209 27 286 4,011 385 77 462 11,49 2,074 214 51 285 4,286 314 109 423 9,92 2,220 177 59 236 4,381 236 314 109 423 9,92 2,220 177 59 236 4,381 236 314 306 423 8,96 2,220 177 59 236 4,381 236 21 206 2,074 117 36 236 4,586 314 226 18 36	January	3,132	382		382	12.20	1,688	198		198	12.12	1,496	181		181	12.30
8,987 458 28 476 11.94 2,100 256 13 248 8,896 452 38 485 12.45 1,991 208 21 289 8,986 374 57 431 10.88 2,028 209 27 286 4,011 386 77 462 11.49 2,074 214 51 286 4,296 314 109 428 8.96 2,220 177 59 236 4,391 238 156 388 8.96 2,219 127 89 216 4,331 236 214 306 10.29 2,219 127 89 216 4,034 225 181 306 2,19 1,973 127 13 239 4,036 214 206 2,19 2,19 2,19 2,19 236 2,19 4,037 214 206 2,19 2,19 2,	February	3,150	409	1	416	13.21	1,655	238	63	240	14.50	1,492	171	10	176	11.80
8,966 452 38 465 1245 1,901 208 21 289 8,966 374 57 431 10.88 2,028 209 27 286 4,011 385 77 462 11.49 2,074 214 51 285 4,296 314 109 423 9,22 2,290 177 59 236 4,381 238 155 388 8.96 2,219 127 38 216 8,444 225 181 408 10.39 2,067 131 100 231 4,056 214 205 419 11.18 1,973 127 112 239	March	3,987	458	23	478	11.94	2,100	235	13	248	11.80	1,881	218	10	228	12.12
3,960 874 57 431 10.88 2,028 206 27 286 8,666 381 59 390 10.64 1,892 198 36 234 4,011 385 77 462 11.49 2,074 214 51 265 4,286 314 109 428 9,92 2,220 177 59 236 4,381 238 156 388 8.96 2,219 187 89 216 8,944 225 181 406 10.39 2,067 131 100 231 4,056 214 205 419 11.18 1,973 127 112 289	April	9,896	452	33	485	12.45	1,991	268	21	289	14.52	1,900	184	12	196	10.32
8,686 381 59 390 10.64 1,892 198 36 234 4,011 385 77 462 11.49 2,074 214 51 285 4,286 314 109 423 9.92 2,220 177 59 236 4,381 233 156 388 8.96 2,219 127 89 216 8,944 225 181 406 10.29 2,067 131 100 231 4,056 207 459 11.13 1,973 127 112 239	Мау	3,960	874	22	431	10.88	2,028	209	27	286	11.64	1,926	165	30	195	10.12
4,011 385 77 462 11.49 2,074 214 51 265 4,286 314 109 428 9.92 2,220 177 59 236 4,331 233 156 388 8.96 2,219 127 89 216 8,944 225 181 406 10.29 2,067 181 100 231 4,056 207 187 11.18 1,973 127 112 289	June	3,666	331	28	390	10.64	1,892	198	88	234	12.87	1,770	133	23	156	8.81
4,296 314 109 423 9,92 2,220 177 59 296 1 1 2 296 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	July	110'4	382	11	462	11.49	2,074	214	51	265	12.78	1,928	171	26	197	10,22
8,944 225 181 406 10.29 2,067 181 100 231 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	August	4,266	314	109	428	9.92	2,220	177	29	236	10.63	2,040	137	20	187	9.17
8,944 225 181 406 10.29 2,087 181 100 231 8,765 214 205 419 11.13 1,973 127 112 239 4,058 207 187 894 9.71 2,150 128 108 231	September.	4,331	233	155	388	8.96	2,219	127	68	216	9.73	2,107	106	99	172	8.16
4.058 207 187 894 9.71 2.150 128 108 231	October	3,944	225	181	406	10.29	2,067	181	100	231	11.18	1,872	18	81	175	9.35
4.058 207 187 894 9.71 2.150 128 108 231	November	3,765	214	302	611	11.18	1,973	127	112	239	12.11	1,788	87	93	180	10.07
	December	4,058	202	181	768	9.71	2,150	123	108	231	10.74	1,901	78	43	163	8.57

a Excluding 60 in unknown months.

TABLE 56.—The Months of Births and of Deaths of Children Born in 1887, who Died under One Year of Age.

	1 19				Mo	Months	of	Death,	1, 1887	7.							Mont	ps o	Months of Death,		1888				1 19	188	un I
Months of Births, 1887.	Born in I died und year of a	Jan.	Feb.	Mar.	Apr.	May.	'eung	July.	'any	Sept.	,390	,vov	Dec.	Jan.	Reb.	Apr.	May.	'ounf	.ylut.	'Suy	Sept,	Oct.	,vov	Dec.	Per cent cand month, a	Births in I as return d	Per cen children died aged der 1 me der 1 me
Born in 1887, died aged } under I year	5,072	139	191	278	298	233	568 5	204 5	540	99	878 81	811 899	041 6	0 148	8 141	104	108	108	130	141	2	12	*			46,166	
January	382	129	31	22	16	12	17	43	1	88	14	10	00	1	+	-	- 1	-	-	- !	- 1	-	- 1	- 1	33.77	8,132	4.12
February	416	-	160	2	83	21	17	15	33	25	13	12 1	=		+	:	+	- 1	- 1	1	1	1	- 1	1	38.46	3.150	2.08
March	476	1		201	60	83	31	28	52	22	10	6 1	=======================================	10	13	1	- 1	-	1	-	- 1	1	-	1	42.23	8,987	5.04
April	485	1	1	1	220	13	53	75	47	153	29	14 1	1 11	11	9 10		1	- 1	- 1	1	-	1	1		45.36	3,896	5.65
May	431	1	-	1	1	162	38	4	75	25	83	15 1	191	1 1	91	9 19	6	1	1	-	1	-	-		37.59	3,960	4.09
June	390			1	1	1	148	68	99	23	139	00	21	1 1	12 24		8 11	1	1	1	- 1		1	1	37.95	3,666	4.04
July	462	1	1	1	1	1	1	211	88	57	23	17 2	23	2 14	4 19	9	1 15	13	1	1	1	1		1	45.67	4,011	5.26
Angust	423	1	-	1	1	1	1	1	195	88	88	16 1	17 1	14 1	16 18	8 13	8 21	28	12	1	-	1	1	1	46.10	4,266	4.57
September	888	1	1	1	1	1	1	1	-	691	36	15 1	18 1	13	15 10	0 15	25	20	22	88	1	- (i	- 1	43.56	4,331	3,90
October	406	1	1	-	1	1	- 1	1	1	-	175 2	26 2	24 1	18	19	-	8 10	133	88	2	22	1	1	1	43.10	8,944	4.43
November	419	- 1	-	1	1	1	1	1	1	1	177	_	87 21	_	17 20	0 15	5 13	11	88	9	83	=	i	-	42.24	3,765	4.70
December	394	1	- }			1		1	i	1	1	202		21 20	0. 17	7 15	2 13	81	83	88	7	4	+	1	52.53	4,058	5.10
Deaths at (No of Deaths	5,072	1						1	i		1 1		2154	54 429	9 372	332	277	270	245	210	230	240	170	168	42.47		4.67
each age Ages in Mos.			1	C						2	13		3	-	_	6	8	10	2	7	œ	6	10	=		Į	

That is, per cent of children who died during month of birth to total born in 1887 who died aged under one year.
Excluding 60 in unknown month, "24 male, 28 females, and 76 unknown sext.
That is, of the children born in 1887, the per cent who died during month of birth, —eccrding to the returns of births and deaths.
It should be borne in mind that probably a larger proportion of the births and of the deaths are returned for the later months of the year.

TABLE 57.—The Relation, by Months, of the Decedents aged under One Month to the Births Returned for the year 1888.

	Star atc. Stravified	Year,						Moi	Months, 1888.	86					
		88	Jan.	Feb.	March.	March. April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Unk.
	(Births	48,952	8,531	8,516	4,099	3,963	4,214	4,188	4,228	4,514	4,415	4,306	8,811	4,198	5
Totals	Totals Deaths aged under one month	2,786	197	88	218	285	242	218	223	288	8	210	225	288	7
	Per cent of deaths to births	5.71	5.58	5.93	5.07	2.94	5.74	5.15	5.42	6.49	5.12	86.4	2.90	6.8	15.56
	Births	25,526	1,829	1,843	2,120	2,067	2,174	2,116	2,190	2,398	2,268	2,245	1,959	2,288	7 2
Males	Males	1,651	108	123	181	120	145	130	132	181	27	118	132	181	60
	Per cent of deaths to births	6.47	5.68	6.67	6.18	5.81	6.67	6.14	6.08	7.81	6.30	5.26	6.74	8.01	12.50
	Births	23,401	1,699	1,669	1,979	1,888	2,088	2,016	2,080	2,121	2,145	2,059	1,850	1,898	19
Females	Females Deaths aged under one month	1,128	16	8	88	118	88	88	88	901	22	8	82	101	83
	Per cent of deaths to births	4.82	5.38	16.4	4.40	6.00	4.71	4.12	4.6 8	2.00	8.78	4.47	4.97	5.65	10.53
	(Births	ĸ	•	4	i	•		-	•		63	Ħ	63	63	81
Unknown	Onknown Deaths aged under one month	17	ø	83		83	-		83		-		-	83	67

• Still-births included.

TABLE 58.—Exhibiting certain Details concerning persons returned as having Died aged One Hundred Years and over during the year 1888.

			Married		A	Age.			Place of Death.	Death.	Date of Death, 1888,	1888.	
Names of Centenarians, 1888.	Sex.	Color,	Single or Widowed.	Birthplace.	,saesY	Months.	Days,	Occupation,	Тоwп,	County.	Month.	Day.	Cause of Death.
John Haywood	Male	White	Widower.	England	101	1	88	Farmer	Wayland	Allegan	May	00	Old age.
Hannah L. Greene	Female	White	Widow	New York	100		17	1 14 Housewife.	Keeler	Van Buren	November.	28	Old age.
Millie Morgan	Female	Black.	Widow	N. Carolina.	100	1	-	Unknown	South Haven Van Buren February	Van Buren.	February	Unk.	Old age.

TABLE 59.—Counties and Townships from which no Returns of Deaths for 1888 were received by this Department, showing Population in 1884.

Females, Unknown. Males. 62 13 89 13 996 Females Nativity. 114 55 Males. 2,284 110 Females Native. 2,825 170 151 20 18 Females. Unknown Color. 77 Males. Population, June 1, 1884. # Totals, 8 Indians. 49 Color or Race. 26 3 12 Females. Black and Mulatto, = 00 67 Males. = .stato'I 8,191 350 16 165 898 50 128 165 105 19 Females, White. 4,537 300 8 828 Males, 7,728 216 1,055 533 800 291 124 8,259 691 23 20 61 28 Females, Totals. 4,621 177 280 99 Males. 7,880 1,055 300 220 148 124 Townships from which no Returns of Deaths for 1888 were Received, a Drummond Thompson. Springfield Richmond Big Creek Riverside. Harmon. Lake Atherton Beaver Comins .. Mecosta Chase.... Brooks. Counties. Schoolcraft Oscoda.... Marquette Chippewa Missaukee Kalkaska. Newaygo. Mecosta. Total. Lake.

The townships of Mikado, Alcona county, and Trout Lake and White Fish, Chippewa county, were organized since the census was taken.

RELATIONS OF DEATHS OF CHILDREN TO BIRTHS, BY MONTHS.

Table 57 shows, by sex, by months, the number of births, the number of deaths of persons aged under one month, and the per cent of such deaths to births. Each year the proportion of males is greater than that of females and corresponds with the larger proportion of males born. This condition might be expected and accords with extended observations. The total number of deaths under one month was 2,796, being 5.71 per cent of the births. Of this number 6.47 per cent were among the males and 4.82 per cent were among the females.

DEATHS OF CENTENARIANS.

In Table 58 may be seen the names and other principal facts concerning those persons who died in 1888 after reaching the age of one hundred years or more. One of these individuals was a male and two were females, the male being the oldest of the three. Two were natives of this country and the male was born in England.

DELINQUENT TOWNSHIPS.

Table 59 shows the townships from which no returns of deaths were received for the year 1888, and also the counties in which they are located. There were 15 such townships representing a population, according to the census of 1884, of 7,880 and there is not much doubt that many deaths occurred in some of them, especially such townships as Chase in Lake county and Brooks in Newaygo county. Every supervisor who fails, by refusal or neglect, to make these returns is liable to a fine of one hundred dollars and costs of prosecution.

TOWNSHIPS IN WHICH NO DEATHS OCCURRED.

There were fifty-four townships in Michigan in which it was reported that no deaths occurred in 1888. Thirteen of these townships have been organized since the census of 1884 was taken, and for this reason it is impossible to give the number of their populalation. The number of deaths occurring in some of these thinly settled townships would, from several apparent causes, be small, but it is hardly credible that there were no deaths in townships having nearly a thousand inhabitants.

The number of deaths by sex, months and periods of age, which were returned from each and every county in the State, may be seen in Table 61.

1

TABLE 60.—Counties and Townships in which it was reported that no Deaths occurred in 1888.

	Townships,	Po	pulati	ion.		Townships,	Po	pulati	on.
Counties.	No Deaths in 1888.	Totals.	Males.	Females,	Counties.	No Deaths in 1888.	Totals.	Males,	Females.
Totals		8,445	4,938	3,507	Mason	Lincoln	131	76	55
Alcona	Curtis	179	97	82	Midland	Greendale	50	24	26
Alcona	Gustin a					Ætna	123	76	47
11	(Burt a				Missaukee	Forest	141	74	67
Alger	Onota a					Reeder	422	278	144
	(Colfax	179	91	88	Was to take an	(Hillman a			
Benzie	Joyfield	198	103	95	Montmorency	Wheatfield a			
	Lake	65	38	27		Goodar a			
	Chandler	164	86	78		Horton	228	135	93
Charlevoix	Hudson	117	61	56		Klacking	284	152	132
	Melrose	296	155	141	Ogemaw	Logan a			
	Ellis	116	71	45		Mills	62	33	29
Cheboygan	Forest a					Richland	206	116	90
	Waverly	49	33	16	Osceola	Cedar	229	117	112
	(Ball	130	77	53	Oscoda	Greenwood	83	39	44
	Blaine a					Charlton	208	169	39
	Frederic	355	240	115		Chester a			
	Maple Forest.	148	90	58	Oteego	Corwith	613	338	275
	South Branch	200	110	90		Hayes	201	110	91
Delta	Baldwin	345	199	146	Presque Isle	Metz	221	122	99
Gogebic	Marenisco a					Gerrish	251	193	58
Iosco	Thompson	42	26	16	M	Markey a			
Kalkaska	Cold Springs.	128	68	60	Roscommon	Richfield a			
Keweenaw	Clifton	182	96	86		Roscommon	161	104	57
	Center	79	46	33	Shiawassee	Fairfield	903	501	402
	Cherry Valley.	223	140	83		(Springville	213	145	68
Lake	Eden	71	46	25	Wexford	South Branch	95	55	40
	Yates	354	208	146					

a Organized since census was taken.

TABLE 61—Exhibiting for the State and Counties, by Sex, the Number of Deaths returned in each Month of the Year 1888, and the Number of Deaths at each Period of Age.

								Months,		1888.										A	868	in P	Ages in Periods of Years, 1888.	la of	Year	18, 18	88					
State and Counties.	Sex.	Year, 1888.	January.	February.	Матећ.	April.	May.	June	July.	Angust.	September.	October.	Мочетьег.	December.	Unknown.	Under 5.	5 to 10.	10 to 15.	12 to 20.	20 to 25,	.08 of da	.68 of 08	35 to 40.	.64 of 04	45 to 50.	50 to 55.	55 to 60.	- ,65 of 08	65 to 70.	70 to 75.	75 to 80.	80 and over. Unknown,
	(Totals	21,764	1416	1585	1865	1900	1858	1627	1789	3169	8261	1848	1642	2012	89	8180	188	265	835	696	882	169	780	679	629	999	698	841	952 9	947 8	889 10	1042 305
	Males	11,722	752	830	866	166	1011	982	941	1156	1072	1004	888	1099	88	6691	454	287	402	455	426	336	381	853	385	356	876	486	550 5	543 5	208	563 184
State	Females	10,024	199	752	998	916	846	695	846	1013	905	84	743	911	26	3763	427	298	430	514	459	358	300	828	274	310	322	355	405 4	404 3	388	479 121
	Unknown.	18	02	00	1	60	-		63	1	1	- [-	64	œ4	18	-	1	1	1	1	T	1	- (-	-		1	1	1	+	1
	Totals	28	1	63	-	62	-	70		62	62	7	4	7	1 :	8	63	-		00	-	12	63	-	1	-	90	-	00	1	1	1 9
Alcona	Males	17	-	-	1	7	-	20	1	0.1	-	6.3	53	6.3	- {	10	-	+	1	03	1		03	1	1	-	63	н	92	1	+	1
	Females	п	- 1	-		-	-	63	. !		-	62	6.0	23		4	69	1	-	-	-	1	1	-	1	1	1	- !	i	1	1	1
	Totals	15	1	1	1	- 1	.03	-	Н	7	6/1	50	63	1	1	*	10	63	=	1	H	1	H	1	1		- 1	=	i	1	1	1
Alger	Males	10			1	1	1	-	1	20		1	-		31	-	00	1	1		1	i	1	-		1	1	-	1	1	- 1	1
	Females	10	1	1	1		.23			63	63	00	-	1	- (62	63	63	H	1	H	1	-	1	-		1	1	1	1	- 1	1
	Totals	423	33	34	35	33	889	35	40	88	47	33	30	32	1	142	00	9	28	18	15	10	*	19	00	21	13	23	22	18	24	22
Allegan	Males	220	17	16	20	13	21	8	18	17	27	17	17	17	- 1	8	9	4	10	10	9	*	63	10	-	6	12	=	13	9	10	11
	Females	203	16	18	15	8	12	15	22	21	20	16	13	12	- 1	22	03	63	13	00	6	9	49	8	-	12	7	14	130	13	41	16
	Totals	117	90	60	00	00	13	19	1	52	11	13	7	00	-	88	+	10	1	64	4	-	69	4	83	-1	63	1	es.	03	-	1
Alpena	Males	70	1	00	-	9	00	12	9	12	7	6	60	60	1	61	63	4	1	+	00	-	-		44	1	-	1	-	63	-	1
	Females	47	63	1	63	63	rG.	7	10	10	4	4	rG.	-	-	37	60	H	1	+	-	1	-	=	1	1	-		7	+	1	1
	Totals	76	10	7		7	10	90	7	11	-	70	10	7	1	30	9	00	63	4	10	:	*	63	63	63	6.3	60	+	1	00	00
Antrim	Males	98	*	65	63	4	-04	1	23	9	10	00	4	93	1	17	63	63	-	6.3	63	1	64	-	1	*	-	60	H	- 1	-	63
	Females	37	1	4	NO	200	00	63	10	10	60	69	-	4		13	*	-	-	00	00		63	-	04	-	-	- 1	80	1	60	=

	Totals	48	10	-	63	00	4	63	4		*		0	0								*	-	-	1	63	1	-	-	_
Arenac	Males	31	4	*	63	т	00	1	00		03		-	10								-	-	T	1	63	-	-	- 1	-
	Females	17	1	00	-	91	-	н	-		03		*	1	_	1 2	- 1	-				00	1	-	1	1	1	- 1	-	î
	Totals	46	61	63	60	10	00	61	-	60	00	1-	7	+	22	- 1	- 1	- 1	93	4	-	1	Ŧ	1	Ħ	1	1	-1		- 1
Вагада	Males	28	-	- 1	-	*	-	63	-		-#		10	00					0.3				H	1	1	-		- 1	-	1
	Females	18	-	03	н	1	0.3	1	- 1		*		23	+					-		- 1	ij	1	1.1	-		1	1	3	_ [
	Totals	177	9	13	10	15	24	00	17		8		18	18					6			67	00	7	9	=	13	=	11	
Berry	(Males	92	KO	10	7	7	10	-	00		=		10	-					60			-	1	10	61	-	6			
	Females	82	7	00	9	00	13	1	6		-		00	=		*	4	90	1	1	0	63	60	23	*	+	+	10	6 3	00
	(Totals	481	22	55	31	8	12	29	25				30	45					21			14	14	17	=		6	-	-	
Bay	Males	263	17	20	15	21	30	16	23				17	26					H			9	80	=	61		9			
	Females	218	Ξ	17	16	27	21	13	27			13	13	19					10			00	9	9	6		99		_	
	Totals	525	H	63	10	7	9	60	63				7	63					00	- 1		-	00	-	63		03		_	
Benzie	Males	31	-	eu	63	4	04	67	H				23	03				- 1	63	0.10	- 1	1	63	1	H		-		-	
	Females	21	1	1	00	92	4	1	1		- 1		00	1					H	100		-	-	+	-		60	- 1		
	(Totals	335	2	25	27	29	53	23	83				24	_					15			9	=	6	13		-	19		
Berrien	Males	166	=	16	18	12	12	=	17				12						7			-	9	9	10				=	
	Females	169	13	6	14	17	17	12	6				12						00			10	10	60	00			8		
	Totals	255	123	24	26	21	24	139	22			24	22	21					12			00	-	10	9				24 25	
Branch	Males	128	9	14	15	12	11	1	12				12					- 1	63			63	*	4	60			=======================================	_	
	Females	127	9	10	11	6	13	9	10				10	_					10			10	00	9	*					
	Totals	388	13	8	31	47	30	22	31				34						17			15	13	16	18				88	
Calhoun	Males	189	.0	17	13	20	18	14	16				00	_					9			10	7	6	00				20 17	_
	Females	195	-	=	18	22	12	00	12				36						=			10	6	-	10			12 1		
	Totals	172	=	Ξ	24	16	119	12	~				11						10			00	-	10	10			11 16	8 13	
Савв	. Males	92	9	10	12	6	11	60	60				1						63			93	*	+	00			6 1		_
	Females	80	10	9	12	7	00	7	10				1	0/3	10				60			10	60	1	90	61		_		

TABLE 61.—Continued.—Deaths by Counties, by Sex, by Months, and by Age, 1888.

								Months, 1888	hs, 1	888										AB	Ages in Periods of Years,	Per	iods	of Y	ears	1888	œ				
Counties.	Sex.	Year, 1888.	January.	Pebruary.	Матећ.	April.	May.	June.	July.	August.	September.	Осторы.	лотетьет.	December.	Unknown,	5 to 10.		15 to 30,	20 to 25.	25 to 30.	30 to 35.	85 to 40.	.db od 0b	45 to 50.	50 to 55.	.00 of 66		60 to 65.	70 to 75.	75 to 80.	.19vo bas 08
	(Totals	48	63	7	60	-	00	=	99	00	70	7	*	00	-	21	-	H	10	00	+	-	0.3	99	-	=	1	-	-	-	0.1
Charlevoix	Males	8	ij	- [1		-	- 1	43	do	NO.	7	99	1	7	00	-	-	99	-	1	- 1	н,	-	1	-	1	-	_	÷	1
	Females	28	63	-	-	-	-	-	-	10	1	03	-	93	1	13	1	-7	01	63	00	-	-	60	-	+	1	1	1	-	63
	Totals	108		9	7	93	8	12	=	13	11	6	6	16	4	25	10	9	63	10	80	-	-	93	-	4	- 1	4	01	6.3	0.3
Cheboygan	Males	49	- 1	63	03	-	99	00	00	9	4	10	9	00	;	36	99	63	*	8	-	9	1	-	1	-	1	91	-	-	03
	Females	25	- [4	4	63	93	4	00	7	7	+	00	00	1	56	F	*	25	03	03	-	-:	63	- 1	63	1	2/	2	-	- }
	(Totals	63	4	7	9	-	9	10	10	90	9	ro.	9	+	1	88	9	61	•	10	92	65	03	- 1	63	*	-1	21	_	1	- 1
Chippewa	Males	98	63	*	20	-	*	00	63	43	00	20	KO	63	1	14	93	03	100	1	60	01	1	;	-	-	- 1	-	-	1	- :
	Females	252	64	80	93		03	23	99	9	00	-	-	63	-,-	12	99	¥	-	+	1	1	1	1	-	90	-1	-	- 1	-1	0
+	Totals	79	10	7	9	77	00	12	93	-	4	-	0.3	10	:	88	*	2	63	03	10	00	9	200	+	:	00	60	01	-	1
Clare	Males	33	4	4	2	20	89	03	64	1	-	4	61	1	1	12	63	- 1	1	- 1	NG.	93	93	-	00	- 1	00	23	- 1	1	
	Females	46		93	-	50	10	6	-	-	93	20	1	10	1	21	63	61	23		10	-	63	63	-	- 1	1	100	61	-	1
	Totals	237	16	16	21	88	30	83	15	83	27	21	00	14	-	29	00	-	6	6	00	138	=	12	9	27	=	14 17	7 13	15	12
Clinton	Males	116	10	12	10	00	13	15	9	6	13	11	93	10	-	32	10	80	25	00	*	10	*	9	*	10	10	00	90	30	8
	Females	121	9	*	H	18	7	1	6	14	14	10	10	3	1	24	00	+	-	9	*	90	-	9	63	1	9	9	8	7	6
	Totals	7	1	1	-	-	-	63	1	1	63	1	1	1	-	23	1	1	-	1	-	1	- 1	-	-	-	+	-1	- 1	- !	- 1
Crawford	Males	*	1	-	-		1	0.1	1		-	1	1	1	1	64	1	-	1	+	-	1		-	1	+	+	- 1	-	1	1
	Females	93	-	1	1		_	-	1		1		-	1	-1	1	1		-	- 1	-	+	+		:	-	÷	+	- !	- 1	- }
	Totals	165	7	03	7	12	13	15	15	28	28	23	3	6	1	75	9	*	10	120	18	10	00	ю	-	00	03	-	1	94	61
Delta	Males	101	4.	23	7	90	90	11	7	14	14	14	-	10	1	0#	*	99	00	10	01	93	-	4	-	9	-	-	-	-	24
	Females	19	00	-		-	20	-	00	12	123	6	63	*	-	7	03	-	03	00	60	63	-	H		0	-	_		-	

	Totals	296	22	20	30	17	23	20	62	53	25	400	22	26		200	9	00	10	=	12	22	15	10	12	14	14 3	26 25	5 24	18	4
Eaton	Males	160	14	=	18	7	14	17	13	12	12		16	15			*	-	*	90	00	10	1	63	9	00		17	1	15	•
	Females	136	10	6	123	10	13	9	16	12	13	12	9		33	7	6.0	-	9	00	4	œ	00	02	9		10	9 14	9	00	-
	Totals	98	10	15	129	13	10	60	9	4	=		9	*	40		63	-	9	*	+	9	10	63	4	03		20		6.1	-
Emmet	Males	20	4	00	7	10	7	00	93	00	-		10	-	22		1	1	92	1	00	H	H	-	63					61	-
	Females	46	1	7	10	00	9	1	00	-			-	90	18		64	-	00	93	1	10	*	-	00			63	-	1	
	(Totals	270	11	23	23	53	30	38	18	24		38	13	21 4			-	14	14	12	13	-	7	-	90	*	,	-		21	10
Č	Males	126	10	=	14	=	16	=	-	10			-	10 2			60	00	10	00	60	ro	*	63	01			8	11	10	4
төпевее	Females	143	9	123	6	13	11	12	=	14			12	_			4	11	6	6	10	24	60	10	9					Ξ	_
	Unknown		1	1		1	1	1	-	1	1	- 1	+	- 1		-	1	1	i	1	I	1	1	1	1	1	1	1	1	- 1	:
	Totals		00	1	1	-	63	1	63	03	1		н	1	_		1	1	i	+	1	1	1	1	1	1	:	- 1	63	- 1	:
Gladwin	Males		İ	1	-	1	-	1	-	1		-	-	1	*	1	1	1	i	1	1	1	1	1	1	1	1	-		1	į
	Females		63	1		-	H	- 1	-	- 1		- 1					1	1	1	-	1	1	1	1	1	1	D.	1	63	1	+ }
	(Totals		13	6		13	6	19	00									60	14	13	9	-	67	-	*	=	63	- !	1	- 1	9
Gogebic	Males		16	9		00	10	Ξ	10					15				03	6	00	10	*	-	н	03	1	3	1	1	-1	œ
	Females	19	60	00	9	ю	4	00	00	11	*		-	0	_		1	00	10	10	=	:	=	1	-			. :		-1	63
	Totals	131	12	11		00	12	13	6					6	32			=	4	10	00	KG	7	10					10	9	83
Gr. Traverse	-	20	10	63		4	6	8	10									00	1	1	00	***	10	*						.00	-
	Females	19	7	6		*	60	4	4							- 4		00	*	4	10	-	63	1						00	-
	(Totals	168	-	21		19	10	6	00									12	00	10	9	61	an's	9						10	-
Gratiot	Males	98	*	13		9	10	NG.	01						-			10	7	03	00	20	-	63						9	-
	Females	28	99	00		18	10	4	100					+				-	-	50	60	1	63	*		*	63	62	4	4	:
	Totals	259	13	16	-	22	56	17	22				9					7	8	10	00	6	00	1					-	22	•
Hilledale	Males	136	*	6		=	18	00	10				5	14 1				4	00	4	ea.	10		9					-	12	-
	Females	123	6	1	13	13	00	6	=									00	10	9	9	*	00	-						12	63
	(Totals	343	26	17	88	53	30	53	55				-		194	53		12	10	14	6	12	-	12						+	•
Houghton	Males	190	12	10	83	20	11	=	16					13	106	11		-	4	œ	+	7	*	00				1 6	-	1	-
	Females	158	11	-	16	10	13	18	21	18	20	80	00	80	88	=		10	9	9	10	20		4		1		1	60	00	~

TABLE 61.—Continued.—Deaths by Counties, by Sex, by Months, and by Age, 1888.

ı	(Пиноми.	-	:	_	•	:	••	_	_	:	•	87	_	-	_	;	2	4	•	∞	20	89
	, 18vo bas 08	20	4		3	12	6	12	=	유	=	-		:	:	+	10	7	_	81	91	12
	12 to 80.	-	2	8	8	50	10	2	•	•	10	80	-67	-	=	- ;	20	8	~	*	8	9
	10 to 15.	6	4	20	*	=	2	8	=	7		:	· ;	:	:	$\frac{\cdot}{\cdot}$	тО.	10	:	61	6	9
	.07 03 58	7	တ	*	큚	21	13	21	-	7	67	83	Ť	÷	i	÷	က	67	=	8	77	7
	.60 to 65.	00	67	9	18	=	œ	16	6	7	-	-	1	- ;	- ; ·	• ;	2	20	83	23	13	8
.	22 to 80.	•	63	_	23	12	10	11	7	7	83	87	1	-	-		NC.	တ	83	18	00	9
8, 18	.66 ot 06	10	*	=	12	00	7	9	10	ĸ	တ	87	-	i	Ť	Ť	10	-	4	9	4	9
Ages in Periods of Years, 1888.	45 to 50.	*	87	69	8	0	21	10	83	8	00	•	i	i	i	i	F	:	=	17	6	∞
ls of	40 to 45.	-	_	Ī	13	7	9	8	တ	89	00	-	7	_	-		20	8	တ	12	7	œ
eriod	32 to 40.	ø	-	81	91	00	90	=	က	00	_	=	-	-	-	i	7	_	•	12	83	9
in P	30 to 35.	4	23	67	11	*	7	13	4	6	-	-	-		1	-	4	81	67	9	တ	69
Agree	S2 to 30°	œ	63	60	17	00	6	9	_	70	0.	00	_	-	=		4	=	တ	9	ıc.	-20
,	.62 04 02	13	2	11	18	9	12	8	4	2	10	23	8	_	-		13	7	6	21	6	12
	15 to 20.	12	20	-	12	11	9	12	ro.	7	10	7	တ	87	67	ī	91	4	9	14	4	9
	10 to 15.	œ	_	7	8	12	9	*	က	=	9	4	63	=	1	_	4	Ø	23	91	7	
	5 to 10.	=	9	20	12	8	6	4	93	=	70	87	တ				6	9	တ	8	13	13
	Under 5.	æ	2	8	102	23	48	8	क्ष	83	8	8	88	7	-	B~	28	42	8	102	22	-5
	Unknown.	-:	- 1		87	-	1	_	-	1	:	- 1	1	-:		1			_;_	9	တ	_:
	Лесешрет.	15	œ	7	8	15	18	ଛ	11	6	8	20	4	80	80		8	11	6	33	ଛ	12
	Дочетрег,	13	7	•	ଛ	6	=	83	9	17	6	œ	-	-	-	-	8	6	11	22	13	12
	October.	20	00	12	83	16	17	ଛ	91	10	14	==	ဘ	Ø	7-1	-	8	00	9	88	8	8
	September.	ន	12	00	8	22	17	22	12	9	00	ro	တ	ဘ	8	i	8	0	Ξ	\$	18	21
88	August.	8	œ	12	88	ଛ	81	22	6	12	19	2	•	87	-	-	17	œ	6	4	8	83
Months, 1888.	July.	53	6.	9	8	8	23	22	9	ဘ	3	7	87	81	-	-	22	-	•	8	12	12
ont	Jame.	17	7	13	엻	77	11	18	2	•	12	2	10	+	8	67	9	00	83	22	9	27
2	May.	83	00	15	88	31	17	8	7	22	17	Ħ	9	00	•	-	71	7	-	40	83	17
	.lingA	=	00	တ	1.7	18	22	18	6	9	16	7	6	i	-	i	15	00		8	21	18
	March.	2	6	12	2	8	2	18	=	œ	6	TC.	*	83	Ħ	=	12	7	10	8	11	15
	February.	2	7	Ħ	23	8	7	18	9	12	7	တ	*	8	-	63	71	~	7	83	15	-83
	January.	6	တ	9	13	6	4	11	9	00	2	-	10	i	1	-	7	83	10	82	77	12
	Year, 1888.	808	16	111	408	212	196	228	108	118	141	86	52	ន	2	00	180	91	86	386	800	186
	Sex.	Totals	Males	Females	Totals	Males	Females	Totals	Males	Females	Totals	Males	Females	Totals	Males	Females	Totals	Males	Females	(Totals	Males	Females
	Counties.		Huron		T)	Ingham		Ţ	Ionia	<u>*</u>	Ĭ	Iosco	Ĕ) T	Iron	**	Ţ	Isabella		Ĭ	Jackson	_

	Totals	392		27	87	#	65							11 2	105	7			15	12	21	=	18	10	24	12	_	24 29	17	88	4
Kalamazoo.	Males	231	2	=	52	24	16	8	19	88	20	16	19 2	24	63	9	*	6	9	4	6	6-	14	-	6	00	17 1	15 16	-	엃	67
	Females	161		16	15	20	13							17		1			6	00	15	4	+	60	15	*		9 13	+	16	~ 3
	Totals	42		4	03	03	10			- 4				*	20	63			63	63	H	cd	F	1	00	1		2	1	1	
Kalkaska	Мане	53		H	93	H	4		-4					9	6	-			1	+	T	-	F	i	93	1		1	· į	1	- 1
	Females	20		00	п	63	H								=	-		- 1	1	-	Н	1	1	1	i	i	1	-	-	1	i
	Totals	1,004	50	63	8	8	28						_	1 617	350	83			#	33	35	21	32	33	83				-	52	11
Kent	Males	532	7	31	47	37	4								184	15		28	19	17	14	21	13	18	18	66	21 3	36 35	238	33	4
	Females	472	22	32	88	47	37								166	13			83	62	21	30	16	22	7					21	~
	Totals	20	+	ic.	1	H	7							7	35				01	-	-	92	1	+	1					1	÷
Кемеепам	Males	34	-	20	10	1	-								23	1			23	-	-	00	1	=	1	- 1		- 4	=		-31
	Females	16	00	6/1	61	-	1					-			H	1		- 1	Ť.	1	1	1	1	+	1				-	1	
	Totals	37	4	23	99	4	н								12	20			21	02	1	H	-	П	-			01	1	i	63
Lake	Males	18	62	1	41	=	1								*	1			1	63	1	1	=	1	1	- 1			- }	- ;	
	Females	19	-	-	Ŧ	92	-							63	00	63	- 1	21	63	-	1	-	1	-	1	1	-	-	1	1	
	Totals	245	10	22	10	22	14								20	16			#	6	9	6	00	9	10					23	67
Topoge	Males	117	-	13	00	13	00								83	00			60	10	60	*	63	99	00	-		10 7	17	9	_
Traffical Traffic	Females	124	9	10	10	6	9								83	00			=	*	00	10	9	99	63					9	-
	Unknown	*	02	1	-	1	1						1	1	4	i	- 1		1	1	1	+	1	+	1	100	- 1	1	1	1	-
	Totals	104	9	00	10	12	10							04	Z	10		*		+	99	-		02	-			9		*	
Leelanaw	Males	75	H	00	10	9	00							2	58	00	- 1	1	63	43	-	1		60	-			60	1.6	63	,
	Females	20	40	10	1	9								-	22	63	63	00	10	01	61	н	-	+	1	03	1		-	93	- 40
	Totals	450	53	35	20	45	37								11	10		2	52	13	16	18	20	17	17	-		18.	40	7	
- Common I	Males	238	5	33	67	53	19	23	16	3.17			1 28	8	88	*		9	7	*	9	00	-	=	10	17 1	1 22		83	22	-
TOTAL MARKET	Females	210	16	12	88	22	18								98	9		9	15	6	10	10	138	9	-		9 13	=	15	27	•
-	Unknown.	67	r	+	1	1	1	1	+	-	-	1	-	-	63	1	1	1	1	1	+	1	1	1	+	÷	+		ž	Ť	4
							1	1	1						l				١		1					l					t

TABLE 61.—Continued.—Deaths by Counties, by Sex., by Months, and by Age, 1888.

								Months, 1888.	ths,	1888.											Age	Ages in Periods of Years, 1888.	Peri	ods c	f Ye	ars,	1888					
Counties.	Sex.	Year, 1888.	January.	February.	March.	April.	May.	June.	July.	August.	September.	Осторет.	November.	December.	Unknown.	Under 5.	5 to 10.	1000 12.	15 to 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	.64 of 04	45 to 50.	.65 ot 08	.09 of 66	60 to 65.	65 to 70.	1 70 to 75.	75 to 80.	.19vo bas 08
	(Totals	151	9	=	=	12	2 17	7 14	11 11	11 11	17		7 15		18 1	32	7	70	61	00		22	9	6	9	00	9	00	10	10	11	7
Livingston	Males	88	00	63	9		5 18		00	8	12	07	-	8	10 1	21	9	-	_	-		21	63	10	64	00	02	*	4	03	7	00
	Females	67	00	6	10		-	-	9	63	00	10	50	-	00	11	-	+	-	4	-	03	-	-	-	10	erb.	*	-	52	4	9
	Totals	10	- 1	- 1	1	- }	1	1		1	-	63	-	2	1	1	1	1	1	_	1	1			1	i	-1	-	-	- 1	1	
Luce.	. Males	10	- [- 1	- 1		- 1	1		-	-	60	-	63	- 1	1	- 1	1	- 1	_	-			-	- !	- 1	-	-	-	- 1	- 1	- 3
	Females	-	-1	1	1	1	1	- 1	- 1	- 1	1	- 1	1	- 1	- 1	1	- 1	- 1	- }	- 1	1	1	- 1	- 1	-	- 1	+	÷	1	-1	= i	- 1
	Totals	44	- 1	-	4	-		10	10	-	9	9	4	63	9 1	24	1	63	-	-	_	9	4	69	1	_	6.3	-	1	1	1	-
	Males	235	- 1	-	-	-	-	-	-	-	10		-	63	-	14	-	23	- 1	-	-	-	-	-	- 1	- 1	1	- 1	-		- 1	-
Mackinac	Females	18	1	1	20	-	-	-	_	-	-	63	+			6	-	1	-	1	-	_	00	69	1	-	-	-	i		- 1	-
	Unknown.	-	1	1	1	1	-	1	1	.1	1	1	1	-	7	1	1	1	1	1	1	1	1	- 1	1	1	+	1	1	1	1	- 1
	Totals	324	20	24	20	35	87	8 29	98	0 18	8 29	87	7 23	275	32	113	00	10	10	13	3 14			10	10	7	1	16 1	14 19	119	19	8
Масошр	- Males	182	6	6	=	22	- 77	18 1	15 2	20 11	17	72		10	13	76	*	10	10	9		_	9	9	-	01	6	-	2	10	13	6
	Females	142	11	15		12		10	-	01	7 12	10		13	61	37	*	7.3	10	-	_	-	63	6	-	63	41	6	7 10	6 (9	17
	Totals	230	7	13	16	16	8 20	0 18		17 30	37	12 21	-	14 2	25 1	137	12	03	=	-	10	-	-	00	-	4	1	-	63	60	23	10
Manistee	Males	142	20	7	=	-	1 1	10	5 1	13 18	23		63	8	18	8	*	1	7	99	-	20	63	-	-	00	9	78		50	41	44
	Females	88	23	9	10		2	10	200	4 12	14		6	9	7	43	00	0.3	4	-	_	2	63	-	-	1	+	00	1 2	-	- 1	93
	Totals	*	-	1			-	-	- 1	-	1	- 1	-	-	1	63	i	1	- (1	- 1	1	1	1	-	-	-	1	- 1		1	-
Maniton	Males	63	-	1	-		1	- 1	1	1	-	1	1	-	- }	-		1	4	- 1	1	1	1	- 1	1	-	1	÷	1		i	-
	Famales	65												_	Ξ	*										_		-	_			

-	Totala	697	22	18	27		47	88	3				45	- 1	1 888					-		11	14	7	2	8	200		12	. :
Marquette	Males	569	1	11	20		22	23		-3				1	126				16			00	G	20	00				10	:
	Females	200	13	7	7	13	20	16	22	88	20 1	15 15	19	1			03	5 10		-	4	00	10	6.3	4	10	00	80	-	
	Totals	115	63	9	4		00	13			Y.			H					1	64		1	60	64	9	1			10	•
Мавоп	Males	59	63		00		60	6						H					-	63	-	1	F	-	-	1			н	•
17	Females	26	- 1		1		9	*						1	26					1		1	63	-			- 6		-	:
7	Totals	153	12		6		13	00						1								9	1	63			5-6-3		*	•
Mecosta	Malee	16	6		2		00.	-						1		- 4						60	00	67			100		-	ю
	Females	59	02		4		in.	F			1.			1								00	4				-		60	_
	Totals	308	23		22		27	20				77		63								7	12	00					*	_
Menominee	Males	175	14		13		17	14						63								10	6	1					00	L
	Females	133	00		00		10	9						1							-	63	00	-		63	1		-	:
	Totals	90	00	1	10		*	-						-{						_		-	25	9					80	67
Midland	Males	50	-		60		63	-						- (-	63	10					- 1	_
	Females	40	23		7		63	7				1	-	1								1	=	H	1	1			60	_
	Totals	350	1		1		9	*					*	- 1			- 1		62		- 1	1	-	1	Ť	+	1		1	;
Missarkee	Males	16	1		-	- 1	21	00		53				1			63	;		- 1	-	1	1	-	Ť	1	1	=	1	:
	Females	16	1		1	H	4	-			69			1			63	24			1	-	H	1	i	1	1	- 1	1	:
	Totals	320	20		88	27	98	20						-						9	=	00	12	11	-	16 20		14	83	63
Monage	Males	157	10	14	12	13	=	12			18 1		6	7			7				10	70	7	60	67	8 10	0 13		14	_
200	Females	162	10	14	17	#	12	00						H							9	00	10	00	10	8 10	8		00	_
	Unknown.	1	1	1	i	1	1	1	1	1	1	1		1	-	1	1	- 1	1	1	1	1	1	1	+	+	1		1	:
	Totals	232	6	28	16	22	38	24	- 111			100		-				_			17	11	00	7	9		-	-	10	-
Montcalm	Males	113	23	13	10	13	14	12	-	00	-	8 13	3 6		43	H	62	90	99	80	00	00	90	60	9	*	6	00	=	:
	Females	119		13	9	=	12	12		-				-	40	-					8	00	ю	*	4	4	10		8	-
	Totals	7	н,	6.3	1	İ	1	1	+	+	1		3	1	00	-	1	1	- }	1	1	1	1	H	÷	+	-	- (H	;
Montmorency	Males	ж		63	1	1	1	1	1	1	1	-4	-	1	=	4	-	3	1	1	1	1	1	,	+	1	-	1	-	;
	Females	01	F	i		i			1	-	-			1	62		-	i	-	- {				1	1	-	1	-		:

TABLE 61.—Continued.—Deaths by Counties, by Sex, by Months, and by Age, 1888.

							-	Months, 1888	18, 18	88					_					Age	Ages in Periods of	Per	spo	of Y	Years,	1888					- 1
Counties.	Sex.	Year, 1888.	January.	February.	Матећ.	April.	May.	June	.vlnt.	August.	September.	Осторет.	Мочетьет.	Лесетрет.	Unknown.	5 to 10.	10 to 15.	15 to 20.	20 to 25.	25 to 30.	30 to 35.	.01 to 40.	40 to 45,	45 to 50.	50 to 55.	.09 ot 55		60 to 65.	170 to 75.	.08 of 27 l	.19vo bns 08
	(Totals	461	85	32	88	32	41	88	36	51	36	41	36	26	1 25	258	238	18	14	14 1	16 1	-	10	=	12	12	15.1	01	7 11	19	=
Muskegon	Males	257	17	17	21	22	85	19	19	35	22	21	16	36	1 15	53	6	Į.	00	20	-	00	*	-	9	00	90	-	*	9	10
	Females	204	16	15	12	10	16	#	17	19	15	20	20	30	9	1 90	4	9	9	6	10	93	9	+	9	+		9	7	•	. 8
	(Totals	112	7	00	6	00	12	93	7	12	00	14	123	27		34	9	93	9	10	8	10	99	9	99	00	9	67	8	0	93
Newaygo	Males	99	9	00	9	*	10	03	9	9	10	00	6	. 9		9	9	03	4	61	03	64	-	03	93	01	02	-	_	NO	93
	Females	46	1	10	03	*		-	1	9	00	9	93	9	-	81	- 1		03	93	-	99	02	99		-	00	-	03	- 1	-
	Totals	385	83	31	88	36	31	98	30	98	88	62	22	98	:	1 35	=	8	12	1 1	1	- 61	1 1	12	20 2	12	12	13 26	38	7	88
Oakland	Males	207	19	18	п	22	16	20	13	16	14	19	30	18	1	233	9	00	10	6	00	-1	10	-	13	92	9	6 13	3 18	25	83
	Females	175	10	13	17	14	15	10	17	20	57	13	7	17	:	22.5	10	10	7	123	65	12	00	10	7	00	6	7 13	3 10	16	13
	Totals	98	10	23	п	11	*	7	10	6	10	6		10	-	92	10	9	*	60	64	10	6	-	99	03	00	00	8	10	23
Осевпа	Males	Z	63	9.3	10	7	643	10	03	9	10	9	*	7	1	91	02	4	-	-	-	00	9	-	-	-	-	61	-	*	41
	(Females	17	00	1	9	7	93	63	7	95	102	99	99	93	7	14	61	Q1	99	4.3	-	63	90		41	61	03	-	*	-	1
	(Totals	32	1	10	23	93	1	9	9	60	00	-	-	i	7	*	92	99	01	-	01	63	-	1	1	-	+	-	60	-	- 1
Ogemaw	Males	16	1	90	1	1	-	93	en	63	01	÷.	i	1		00	-		-		-	-	-1	1	-	- 1	+	-	-	1	- (
	Females	16	1	63	1	00		93	92	"	-	1	-	i		9	03	-	-	-	-	-	-	1	-	+	1	1	-	-1	- 1
	Totals	83	1	-	00	1	63	00	0.1	+	-	*	6/3	0.3	7	01	80	+	-	- 1	-	-	- 1	- 1	-	50	1	1	-	-1	1
Ontonagon	Males	13	1	-	93	1	93	1	93	1	-	-	03	1	-	00	03	-	-	- 1	1	1	-1	1		63	+	- 1	1	ı	-
	Females	10	1	1	1	1	1	63	- 1	-	1	4	1	6.3	-	01	1	-	-	- 1		-	- !	- 1	-	-	- 1	1	_	_ ;	- 1
	(Totals	120	9	7	90	22	00	10	00	7	00	12	9	12	-	8	10	61	10	9	63	9	*	00	02	63	-	00	NO.	-	-
Osceola	Males	3	*	4	10	21	93	91	*	20	4	12	20	9		88	*	-	61	-03	61	00	80	*	90	-	-	67	63	4	-
	Females	28	62	00	20	10	10	03	+	7	*	0	M.	d		00							,	4	_						

	Totala	4	-	I	1	1	1	1	-	-	1	-	24	İ	;	1	!	1	!	;	1	1	1	!	1	1	=	1	i	÷	-
Oscoda.	. Males	63	i	1	1	1	1	1	1	-	1	1	-	-	1	-	:	1	-	1	1	1	-	-	1	1	1	- 1	1	1	63
ı	Females	23	į	- 1	- {	-	- }	1	1	1	1	i	-	1	1	- !	1	1		1	- 1	-	į	- 1		-	-	- ;	1	+	- 1
	(Totals	19	64	-	4	1	-	63	67		1	4	1	1	-	4	-				1		1		93	1	1	60	93	- 1	1
Otsego	. Malee	11	-	1	4	1	1	7	1	1	1	63	-	1	:	63	-	-	-	-	1	-	- 1	-		- 1	-	-	63	+	- 1
	Females	00	1	1	1	-		-		1	-	64	1	1	-	- 23	1	1	1	-1	1	- 1	-	1	74	-	- }	-	=	1	-
	(Totals	341	8	30				-		-	22	30	83	27	1 13	681	1					4				120	10		=		11 81
Ottawa	Males	180	7	=		23	10		15	25	13	18	15	15	1 8	98	+		6 9	03	03	*	9	4		10	80	7	-	7	
	Females	161	13	6							6	12	13		7	28						0					3 11		*	7	8
	Totals	88	-	1		03			1		7	48	1	0.1	0.0	29	-						-	- 1	24	-	1	-	-	- 1	1
	Malee	18	-1	i	53	1	23	63	- 1	*	*	20	1		_	-		1 2	1	1	-1	1	1	1	-	1	1	-	-	=	- 1
rresque Isle	Females	19	-	-	60	64	-]	00	1	4	03	63	-	1	1	- 1	1	-	-1	63	67	63	-	1	-		1	1	1	=	+
	Unknown	63	1	1	1	1	1	1	1	1	1	1	1	1		63	1	-		i	1	1	1	-1	-	j	1	1	1	- :	
	Totals	18	1	03	1	1	-	-}	1	00	1)G	63	=	-		-	1	-	-	-	1	į		35		:	-	Ť	- 1	+
Roscommon	Males	12	ij	64	-	-	-	i	1	-	-1	*	20	- 1	1	9	-	1	-	1	1	1	-	1	00	_	j	1	1	- 1	+
	Females	9	1	-	1	1	1	1	1	63	1	-	1	1	1	00	1	1	1	-		1	1	1	-	1	1	-	1	+	+
	Totals	916		57	68	108			81	110		55	79	61	2	127 8							88				24	88	31		92
100	Malee	488	36	22	85	55	88	\$	#	62	48	81	95	55	22	242		13 23	26	3 17	14	19		11	7	10	0 13	18	17	7	15 3
Daginaw	Females	416	33	25	35	53				48	25	22	88	22	-	184						20	91				11	7	14	7	00
	Unknown	-	1	1	1	- 1	1	1	1	3	-	1	1	1	1		4	1	1	- 1	-	1	1	1	1	1	1	4	1	3	-
	(Totals	368		18										25	=	011											20		9	2	
Sanilac	Males	154	=	00		10			~					17	1											9	7 7	10	4	67	13
	Females	114		10	=		-	00	7	123	00	14	6	00	-	45		63	4 10	8 01	93		9	93			4 1		60		
	(Totals	31	82	1	00	4	1							-	1										-	1	-	1	1	7	-
4	Males	19	1	1	61	20	1	23						1	1		1			1					1	-	-	- 1	1	4	-
Denoorerate	Females	11	62	1	1	-	-	-				1	-	-	1	20	1	-		-		1	1	-	1	1	1	1	1	+	+
	Unknown	1		- }	- 1	-	1	- 1	j	1	1	-	- 1	1	1	-	1	- 1	- 1	1	1	i	1	1	-	_	1	- 1	1	7	- 1

TABLE 61.—Continued.—Deaths by Counties, by Sex, by Months, and by Age, 1888.

							-	Ton	Months, 1888	888										-	Res	Ages in Periods of Years, 1888.	erio	ds of	Yes	18,1	888					
Counties.	Sex.	Year, 1888.	January.	February.	March.	April.	May.	June	July.	August.	September.	October.	Мочетьет.	December.	Unknown,	Under 5.	5 to 10.	10 to 12.	12 to 30.	20 to 25.	25 to 30.	30 to 32.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	, 70 to 75,	75 to 80.	.19vo bna 08
	Totals	182	10	6	14	20	11	18	15	16	18	24	10	20	63	9	=	10	7	4	62	*	10	9	00	00	9	13	12	13	63	13
Shiawaseee	Malee	76	63	70	00	6	0.3	10	00		6	18	4	6	н	23	4	•	80	1		64	80	0.3	*	-	02	-	6	-	-	
	Females	88	93	*	9	=	6	00	7	7	8	9	9	=	-	88	7	-	4	*	63	60	01	4	*	7	*	9	20	9	10	
	Totals	482	33	41	43	31	8	35	9	26	48	4	4	46	63	168	38	10	17	8	23	13	00	17	13	18	16	22	23	8	22	23
St. Clair		260	6	22	63	16	15	18	25	53	28	27	88	23	-	38	18	00	7	15	12	7	9	80	6	9	00	15	22	13	18	=
	Females	222	16	20	21	15	12	14	12	27	22	17	16	23	H	88	13	-	10	13	17	9	63	6	4	7	00	-	8	13	14	123
	Totals	838	17	41	25	31	25	22	15	22	32	12	16	88	1	28	20	60	13	14	18	00	17	12	15	77	9	24	88	25	20	8
St. Joseph	Males	173	6	18	88	18	15	17	10	15	16	6	10	=	1	8	6	63	7	20	9	+	9	4	9	-	-	15	13	15	16	8
	Females	165	00	83	28	138	10	10	*0	19	16	12	9	17	1	23	=	-	9	6	12	*	11	00	6	7	63	6	13	10	13	17
	Totals	317	13	22	22	24	22	90	20	80	32	88	23	4	-	88	25	16	11	18	12	14	15	6	9	6	Ξ	=	=	15	10	=
Tuecola	Males	158	6	12	12	9	14	16	10	12	13	16	4	23	-	43	13	00	10	10	63	60	7	*	90	-	9	7	80	=	4	-
	Females.	159	7	10	12	18	10	77	10	18	19	12	15	17		94	12	00	9	00	10	=	00	10	00	10	20	-	92	4	-	10
	Totals	343	119	40	32	37	88	19	19	33	30	28	19	33	-	76	00	7	14	12	13	*	8	11	10	8	13	25	22	13	29	55
Van Buren	Males	166	10	19	16	22	17		9 7	14	17	=	10	19	:	25	20	4	703	4	10	63	62	10	9	-	80	14	10	6	18	22
	Females	177	6	22	16	15	16	10	12	22	13	15	1	14	-	42	10	60	6	00	00	6/1	7	6	*	=	10	=	12	*	=	23
	Totals	411	32	36	22	88	33	31	33	88	24	65	22	45	1	98	11	8	17	21	12	7	16	19	16	16	30	24	30	85	53	253
Washtenaw	Malee	205	13	15	23	19	17	17	19	18	00	15	12	25	1	4	*	10	10	6	7	00	9	8	6	9	10	10	18	8	16	16
	Females	306	19	21	88	119	30	14	13	12	16	17	6	20	_:	39	7	*	-	12	10	4	10	10	7	10	10	14	2	15	19	17

	Totals	5,301	436	387	468	426	22	875	482	218	4	437	8	1184		2508 24	248 12	125	183	2 281	112	163	200 1	176 17	171	183	32 174	4 162	201 2	113	141	*
	Males	2,559	247	214	250	233	584	220	258	296	252	232	218	270	514	113	325	00	98	100	112	92 1	121 10	100	114	85	88 10	08 97	7 98	19	76	8
мауле	Females	2,337	189	171	218	193	192	155	223	223	189	195	167	216	9 111	1152 11	118	75	87.	82 1	901	11	79	192	22	8	19 7	71 65	5 73	48	65	17
	Unknown.	10	1	63	1	- 1	1	1	-	1	-	1	1	-	1	10		- !	- 1	- 1	1	1	1	1	1	1	1	1	- 1	*	- 1	1
	Totals	88	12	7	03	16	7	00	00	KG	7	+	10	10	21	98	4	03	63	9	10	es.	+	99	-	63	-	*		-	93	.:
Wexford	Males	46	9	00	63	6	03	9	-	-	10	+	00	9	1	22	-	61	1	00	60	1	F	93	-	-	00	00	-	1	-	1
	Females	45	9	4	1	7	4	64	01	7	63	00		4	23	91	03	-	03	00	63	41	00		-	1	4	-	6	-	63	1

COLOR OF DECEDENTS IN MICHIGAN IN 1888.

Certain facts of interest concerning the color of decedents in Michigan in 1888 may be found in Tables 62 and 63. The number and proportion of deaths among the white inhabitants may be compared with that of the black, mulatto and indian. By an examination of the last column of the table it will be seen that the death-rate is less than the average for all colors among the white and mulatto inhabitants and greater than the average among the blacks and indians. The proportion of males was greatest among the blacks and indians and least among the mulatto inhabitants.

Table 63 permits a study of the details respecting color of decedents in 1888 in each county of the State.

TABLE 62.—Deaths Returned for the Year 1888, Distinguishing the Color by Number and Proportion of each Sex, and by Sex, the Per Cent of Decedents of each Color to Total of all Colors, and the Per Cent of Decedents to Inhabitants.

Color.	Sex,	Population, June 1, 1884.	Number of deaths returned,	Per cent of deaths of each sex to total of both sexes.	Males to 100 females,	Per cent of deaths of each color to total of all colors, by sex.	Per cent of inhabi- tants of each colors, to total of all colors, by sex, June 1, 1884.	Death-rate. Per cent of deaths in 1888 to Population in 1884.
All colors	Totals Males Females Unknown	a 1,845,778 969,803 875,769 206	21,764 11,722 10,024 18	53.90 46.10	117	100,00 100.00 100.00	100,00 100,00 100,00	1.18 1.21 1.14
White	Totals Males Females Unknown .	1,822,752 957,889 864,908	21,369 11,512 9,880 7	58.89 46.11	117	98.19 98.21 98.26	98.75 98.77 98.76	1.17 1.20 1.14
Black	Totals Males Females	6,854 3,690 3,164	163 98 70	57.06 42.94	133	.75 .79 .70	.37 .38	2.38 2.52 2.21
Mulatto	Totals Males Females	8,258 4,202 4,056	71 35 36	49.30 50.70	97	.30 .36	.45 .43 .46	.86 .83
Indian	Totals Males Females Totals	6,808 8,525 8,278 1,041	150 82 68 11	54.67 45.88	121	.69 .70 .68	.97 .36 .97	2.20 2.33 2.07
Unknown	Males Females Unknown .	477 368 196	11				.05	1.00
Black and mulatto	Totals Males Females	15,112 7,892 7,220	234 128 106	54.70 45.80	121	1.08 1.09 1.06	.82 .81 .82	1.55 1.62 1.47

[•] Includes 70 Asiatic males.

TABLE 63.—Exhibiting, by Number and by Sex, for the State and Counties, the Color of Decedents, returned for the year 1888.

	All	Colors	s, 1888.			White	e.		В	lack		Mu	latte	0.	In	diar	1.	Uı	aka	ov	vn.
State and Counties.	Totals.	Males.	Females.	Unknown,	Totals.	Males.	Females,	Unknown.	Totals.	Males.	Females.	Totals,	Males.	Females.	Totals.	Males,	Females.	Totals.	Males.	Females.	Unknown.
State	21,764	11,722	10,024	18	21,369	11,512	9,850	7	163	93	70	71	35	36	150	82	68	11	-		11
Alcona	28	17	11		28	17	11	.,			-			-							
Alger	15	5	10	1	15	5	10							1							
Allegan	423	220	203		421	219	202					2	1	1							
Alpena	117	70	47		117	70	47														
Antrim	76	39	37		76	39	37											0			
Arenac	48	31	17		48	31	17				-										
Baraga	46	28	18		45	28	17								1		1				
Barry	177	92	85		177	92	85														
Bay	481	263	218		479	261	218		1	1					1	1					
Benzie	52	31	21	137	52	31	21	1													
Berrien	335	166	169	XHI	332	165	167		2		2	1	1								
Branch	255	128	127		255	128	127														
Calhoun	384	189	195		377	188	189	1	2	1	1	5		5							
Cass	172	92	80		160	86	74		8				1	2	1		1				
Charlevoix	48	20	28		40	16	24		10		J,		U	1.5	8	4	4				
Cheboygan	103	49	54		98	48	50		1		1				4	1	3				
Chippewa	63		27	100	55	29	26	1			6				8	10.5	hθ				
Clare	79	1	46	3	79	1 100	100	1						1			U				
Clinton	287	116	121		235	115	120				-	2	1	1							
Crawford	7		3		7	4	3			-	1	1		1		100	1		-		
Delta	165	100	64		162	100		1			100	1	1		2	1	1		-		
Eaton	296	100	136	1	296	160		1			1			1							
Emmet	96		46		61	30	31		1		1		7.77		34	20	14	-			
Genesee	270	100	1	1				1	2	17		7.75		1		_		1	-	-	,
Gladwin	14	0	100	1	14	4		j			1			1			1		1	1	
Gogebic	168		61	15.7	168						1			-					-	-	1
Gr'nd Traverse		1 7 3 3	1	1	130	1000		1	1	100	1			1	****	****	-				
Gratiot			100	1	166	0.53		10	1	1	1	1		1	1		1		1	-	****
Hillsdale	1	0	-	111	258	0.20	1 1 3			770				1	1		1		-		
Houghton			100	8	343	15.75	100	10	1		1					*	-	****	-	-	
	11.50		-	1	1000			m	1		-				****	1			-		
Huron	202	91	111	-	202	91	111	1-											-		

VITAL STATISTICS OF MICHIGAN, 1888.

TABLE 63.—Continued.—Deaths oy Counties, by Color, by Sex.

	All	Colors	, 1888.			White			В	lack		Mu	latt	о.	In	dian		U	n.kı	107	wn.
Counties.	Totals.	Males.	Females.	Unknown.	Totals.	Mades.	Females.	Unknown.	Totals.	Males.	Females.	Totals,	Males,	Females.	Totals,	Males.	Females.	Totals.	Males.	Females.	Unknown
Ingham	408	212	196		403	209	194		5	3	2										
Ionia	226	108	118		226	108	118		4-14-					1.					1		
Iosco	141	89	52		141	89	52			404											
Iron	23	15	8		23	15	8														
Isabella	180	91	. 89		165	. 82	83								15	9	6				
Jackson	396	200	196		392	199	193		4	1	3										
Kalamazoo	392	231	161		381	223	158		7	4	3	4	4								
Kalkaska	42	22	20		42	22	20														
Kent	1,004	532	472		994	527	467		7	4	3	3	1	2		100					
Keweenaw	50	34	16		50	34	16														
Lake	37	18	19		36	17	19	1							1	1				0	
Lapeer	245	117	124	4	242	117	122	9	2		2							1		9	
Leelanaw	104	54	50		68	37	31	18	453.						36	17	19	-		0	
Lenawee	450	238	210		441	232	208		6	6		2		2		6	-	1		0	-
Livingston	151	84	67		151	84	67				Ī			Ī			-	-		N	
Luce	5	5			5	5								-					1		
Mackinac	44	25	18	1	33	18	14	1						1	11	7	4			1	
Macomb	324	182	142	П	322	180	142		1	1	1	1	1				1				
Manistee	230	142	88		225	138	87	1	5				0.5	1					-		
Manitou	4	2	2	1 1	3	2	1		ľ		1	7		-	1		1		1	77	* 10
Marquette	469	269	200		469	269	200	1.	1		1			-			1		1	1	
Mason	115	59	56	1	108	54	54				-				7	5	2		-		
Mecosta	153	94	59		152	94	58		1		1				1	,	1		-	-	
Menominee	308	175	133		300	172	128	1			1				8	3	5		-	1	
	90	50	40		90	50	40	1	****			****			°		3		-		
Midland Missaukee	32	16	16		32	16		1			-				****		-		-		
	320	157	162		319	157	16	10			1				****						*
Monroe	232	113	119		200	1197	161		1	1		1		1							
Montcalm	7	-			230	113	117	1	1		1	1		1							•
Montmorency	1.3	5	2		7	5	2					****		**			**		1		
Muskegon	461	257	204		461	257	204	1													
Newaygo	112	66	46		112	66	46	-													
Oakland	382	207	175		377	203	174	1	4			1	1								
Oceana	95	54	41		92	53	39		1	1					2		2				
Ogemaw	32	16	16		32	16	16	*													
Ontonagon	23	13	10		23	13	10	1													
Osceola	120	64	56		120	64	56														

DEATHS-BY COUNTIES, BY COLOR, BY SEX.

TABLE 63.—Continued.—Deaths by Counties, by Color, by Sex.

	A11 (Colors	, 1888.			White			Bl	ack.		Mu	latte	0.	In	dian		Uı	k	101	vn.
Counties.	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females,	Totals.	Males.	Females.	Totals,	Males.	Females.	Totals.	Males.	Females.	Inknown.
Oscoda	4	2	2		4	2	2														L.
Otsego	19	11	8		19	11	8														-
Ottawa	341	180	161		341	180	161														
Presque Isle	39	18	19	2	37	18	19							1				2			
Roscommon	18	12	6		18	12	6						A				4				
Saginaw	916	499	416	1	907	494	413		2	1	1	2	1	1	4	3	1	1			1
Sanilac	268	154	114		268	154	114														
Schoolcraft	31	19	11	1	29	19	9	1							2		2				
Shiawassee	182	94	88		182	94	88														
St. Clair	482	260	222		481	260	221		1		1										
St. Joseph	338	178	165		335	172	163		2	1	1	1		1					1.		
Tuscola	317	158	159		315	156	159								2	2					
Van Buren	343	166	177		334	159	175		4	3	1	5	4	1							
Washtenaw	411	205	206		410	204	206		1	1											
Wayne	5,301	2,959	2,337	5	5,171	2,888	2,283		89	52	37	35	18	17	1	1		5			
Wexford	89	46	43		89	46	43														

DEATHS OF NATIVE AND FOREIGN BORN INHABITANTS.

An examination of Table 64 will show the nativity of decedents in Michigan for each of the years 1886-1888, and the average for ten years ending with 1887. The per cent of native-born decedents is seen to be a little greater for 1888 than in 1887, but is 2.90 per cent less than the ten-year average. The foreign-born are a little less for 1888 than in 1887, but 1.55 per cent greater than the average. The per cent of unknown nativity was unusually large in 1888, being 1.35 per cent above the average.

Table 65 shows the population in 1884, the deaths in 1888 by nativity, sex, periods of age, and the death-rate, or number of deaths to each hundred of population. As usual, the death-rate is seen to be greater for the native-born than for the foreign-born and also greater than the total for all nativities. This excess among the native-born is more noticeable in the period under five than in any other, but in the more advanced ages the death-rate is seen to be more nearly equal, and is often greater among the foreign-born. It seems scarcely necessary to repeat the observation that native-born decedents contain a large element of strictly foreign people, and also that a very large proportion of the deaths of infants and children is included among the native-born.

Table 66 continues the subject of nativity and exhibits details by number and sex for the State and counties.

TABLE 64.—Nativity of Decedents in Michigan for the years 1886-1888, and the Average for ten years, 1878-1887.

	Deaths	, 1886.	Deaths	, 1887.	Deaths	, 1888.	Average for ending w	er 10 years, vith 1887.
Nativity of Decedents,	Number.	Per cent of Total,	Number,	Per cent of Total,	Number.	Per cent of Total,	Number.	Per cent of Total.
All nativities	18,187	100.00	19,482	100.00	21,764	100.00	16,822	100.00
Native-born	14,079	77.41	14,556	74.72	16,328	75.02	18,108	77.92
Foreign-born	8,587	19.45	4,187	21.49	4,501	20.68	8,218	19.18
Unknown	571	8.14	739	3.79	985	4.30	496	2.95

TABLE 65.—By Nativity, Sex, and Periods of Age, the Population in 1884, the Number of Deuths in 1888, and the Per Cent of Deaths to Inhabitants.

	д	habitan	ts of Mic	higan, J	Inhabitants of Michigan, June 1, 1884.	.84.	a	eaths in	Michi	Deaths in Michigan in 1888	888	ñ	Death-rate; Number of Deaths to 100 living.	e; Num 100 L	iving.	Deat	ns to
Ages in Years and Periods.	All Na	All Nativities.	Na	Native.	For	Foreign,	All Nativilles.	ivilles.	Native.		Foreign.	-	All Nativities.	3.7	Native.	For	Foreign.
	Males,	Lemsies.	Males.	Lemejes.	Males,	Kemales.	Males,	Females,	Males.	Females,	Females.	Males.	Females,	Males,	Lemales.	Males.	Females,
Totals	974,424	820,028	695,490	662,145	272,298	214,669	11,722	10,024	8,640 7,	7,670 2,542	1,959	99 1.20	0 1.14	1.24	1.16	8.	.91
Under 5	114,852	111,116	108,681	105,166	5,972	5,768	4,699	8,768	4,529 8,	8,606	1 28	4.09	9 3.39	4.17	3.43	1.36	1.25
5 to 10.	110,263	107,963	806'96	94,682	18,126	12,491	121	427	397	398	15	29	04.	14.	.42	68.	.23
10 to 15.	99,721	96,508	86,116	88,467	13,878	12,858	267	208	230	259 3	31	28	18.	72.	18.	55	.25
15 to 20.	92,038	91,010	72,783	72,803	18,910	17,997	402	430	305	828 8	88	19	147	.42	.49	4.	98.
20 to 30	190,217	163,177	122,786	115,746	65,028	46,987	881	978	220	895 273	3 243	3 .46	99.	.45	.60	.43	.52
30 to 40.	139,282	116,333	80,547	74,082	57,399	41,981	717	757	888	462 284	14 263	.51	.65	.49	.62	.49	.63
40 to 50.	97,381	85,898	53,408	52,016	43,354	33,674	738	009	357	342 326	6 227	7 .76	3 .70	.67	99	.75	.67
50 to 60.	68,020	56,521	87,026	32,813	30,651	23,550	732	632	325	351 355	5 245	5 1.08	3 1.12	86	1.07	1.16	1.04
60 to 70.	40,748	33,149	23,640	19,918	16,939	13,139	1,036	757	206	394 467	2 300	9 2.54	2.28	2.14	1.98	2.76	2.35
70 to 80	16,772	13,949	10,801	000'6	5,885	4,899	1,049	181	632	451 368	8 298	8 6.25	5.64	5.85	5,01	6.25	80.9
80 and over.	4,084	3,659	2,617	2,377	1,389	1,263	268	629	343	292 185	5 163	3 13.96	13.09	13,11	12.31	18.32	12.91
Unknown ages	1,106	350	182	125	272	117	181	121	73	67 3	38	18 16.64	4 34.57	40.11	53.60	13.97	15.88

TABLE 66.—Exhibiting by Number and by sex, for the State and Counties, the Nativity of Decedents returned for the year 1888.

	All	Nativiti	es, 1888			Nativ	e.		13	Foreig	m.			Unkne	wn,	
State and counties.	Totals.	Males,	Females,	Unknown.	Totals,	Males.	Females.	Unknown.	Totals.	Males,	Females.	Unknown.	Totals.	Males,	Females.	Unknown
State	21,764	11,722	10,024	18	16,328	8,640	7,670	18	4,501	2,542	1,959		935	540	395	-
Alcona	28	17	11		16	8	8		8	7	1		4	2	2	-
Alger	15	5	10		12	4	8		2	1	1		1		1	-
Allegan	423	220	203		331	172	159		82	44	38		10	4	6	-
Alpena	117	70	47		105	62	43		11	7	4		1	1		. _
Antrim	76	39	37		60	31	29		15	7	8		1	1		
Arenac	48	31	17		35	25	10		12	5	7		1	1		
Baraga	46	28	18		23	12	11		13	7	6	_	10	9	1	-
Barry	177	92	85		150	75	75		22	13	9	_	5	4	1	-
Вау	481	263	218		363	196	167		114	64	50		4	3	1	
Benzie	52	31	21		42	24	18		7	6	1		3	1	2	-
Berrien	335	166	169		290	141	149		38	23	15		7	2	5	-
Branch	255	128	127		227	111	116		18	11	7		10	6	4	
Calhoun	384	189	195		302	154	148		65	30	35		17	5	12	
Cass	172	92	80		145	73	72		19	14	5	_	8	5	3	
Charlevoix	48	20	28		37	17	20		11	8	8					
Cheboygan	103	49	54		86	39	47		18	10	8	1				
Chippewa	68	36	27		41	23	18		20	12	8		1	1		
Clare	79	33	46		55	17	38		11	7	4		13	9	4	1
Clinton	287	116	121		202	102	100		26	12	14		9	2	7	1
Crawford	7	4	3		6	4	2		1		1					
Delta	165	101	64		113	59	54		50	40	10		2	2		
Eaton	296	160	136		263	136	127		21	15	6		12	9	3	
Emmet	96	50	46		80	43	37		13	5	8		3	2	1	
Genesee	270	126	143	1	215	101	113	1	42	17	25		13	8	5	1
Gladwin	14	4	10		11	3	8		8	1	2					
Gogebic	168	107	61		100	57	43		31	23	8		37	27	10	
G'd Traverse	131	70	61		87	48	39		40	20	20		4	2	2	
Gratiot	168	86	82		150	77	78		14	8	- 6		4	1	3	
Hillsdale	259	136	123		230	118	112		16	10	6		18	8	5	
Houghton	343	190	153		268	147	121		73	43	30	1	2		2	
Huron	202	91	111		135	60	75		63	28	35	1	4	3	1	-

TABLE 66.—Continued.—Deaths by Counties, by Nativity, by Sex.

	All 1	Nativiti	es, 188	8,		Nativ	e.		L	Foreig	gn.			Unkne	own.	
Counties.	Totals.	Males,	Females.	Unknown,	Totals,	Males.	Females.	Unknown.	Totals.	Males.	Females,	Unknown.	Totals.	Males.	Females.	Unknown
Ingham	408	212	196		341	176	165		57	38	24		10	3	7	-
Ionia	226	108	118		178	87	91		40	18	22		8	3	5	
Iosco	141	89	52	4411	103	61	42		36	27	9		2	1	1	
Iron	23	15	8		18	11	7		. 5	4	1					
Isabella	180	91	89		151	80	71		27	10	17		2	1	r	
Jackson	396	200	196		320	162	158		55	26	29		21	12	9	
Kalamazoo	392	231	161		305	182	123		81	45	36		6	4	2	1
Kalkaska	42	22	20		36	17	19	1	6	5	1					
Kent	1,004	532	472		781	385	346		220	123	97		53	24	29	
Keweenaw	50	34	16		40	28	12		10	6	4					
Lake	37	18	19		29	14	15		5	2	3		3	2	1	-
Lapeer	245	117	124	4	192	89	99	4	50	26	24		8	2	1	
Leelanaw	104	54	50		86	43	43		17	11	- 6		1		1	
Lenawee	450	238	210	2	355	179	174	2	72	46	26		23	13	10	
Livingston	151	84	67		117	65	52		32	18	14		2	1	1	
Luce	5	5			2	2			3	3						
Mackinac	44	25	18	1	33	20	12	1	7	2	5		4	3	1	
Macomb	324	182	142		248	139	109		76	43	33					
Manistee	230	142	88		180	117	63		49	24	25		1	1		
Manitou	4	2	2	1155	2	1	1		2	1	1		20.00	1	000	
Marquette	469	269	200		325	175	150		144	94	50					
Mason	115	59	56		90	47	43	-545	24	11	13		1	1		
Mecosta	153	94	59		107	60	47		45	34	11		1		1	
Menominee	308	175	133		225	120	105		72	49	23		11	6	5	
Midland	90	50	40		73	41	32		15	8	7	2	2	1	1	
Missankee	32	16	16		25	13	12		7	3	4	10	-	46		
Monroe	320	157	162	1	249	114	134	1	64	38	26		7	5	2	
Montealm	232	113	119		198	92	106		29	18	11		5	3	2	
Montmorency	7	5	2		6	4	2		1	1	1.5				1 3	
Muskegon	461	257	204		353	197	156	70	107	59	48		1	1		
Newaygo	112	66	46		87	50	37		19	11	8		6	5	1	
Oakland	382	207	175		285	150	135		85	48	37	-	12	9	3	-
Oceana	95	54	41		80	43	37		14	10	4		1	1	Ĭ	
Ogemaw	82	16	16		25	13	12		7	3	4					-
Ontonagon	23	13	10		15	10	5		8	3	5					-
Osceola	120	64	56	****	90	46	44	****	26	15	11		4	3	1	

VITAL STATISTICS OF MICHIGAN, 1888.

TABLE 66.—Continued.—Deaths by Counties, by Nativity, by Sex.

	All	Nativiti	es, 1886	3.		Nativ	е.			Foreig	n.		9	Unkne	wn.	
Counties.	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females,	Unknown.	Totals.	Males.	Females,	Unknown,	Totals.	Males.	Females.	Unknown.
Oscoda	4	2	2		2		2						2	2		
Otsego	19	11	8		10	6	4		9	5	4					
Ottawa	341	180	161		228	128	100		102	44	58		11	8	3	
Presque Isle	39	18	19	2	26	14	10.	2	13	4	9					
Roscommon	18	12	6		11	9	2		6	. 2	4		1	1		
Saginaw	916	499	416	1	655	358	296	1	227	123	104		34	18	16	
Sanilac	268	154	114		162	95	67		104	57	47	-	2	2		
Schooleraft	31	19	11	1	21	14	6	1	10	5	5					
Shiawassee	182	94	88		146	71	75		28	18	10		8	5	3	-
St. Clair	482	260	222		318	168	150		146	82	64		18	10	8	
St. Joseph	338	173	165		268	135	133		35	20	15		35	18	17	
Tuscola	317	158	159		237	121	116		67	29	38		18	8	5	
Van Buren	343	166	177		307	147	160		27	15	12		9	4	5	
Washtenaw	411	205	206		273	132	141		93	52	41		45	21	24	
Wayne	5,301	2,959	2,337	5	3,711	2,034	1,672	5	1,226	707	519		364	218	146	
Wexford	89	46	43		73	36	37		12	8	4		4	2	2	

CAUSES OF DEATH, 1888.

No more important and valuable statistics can be collected than those which relate to the diseases or causes of death in a community. For this reason, the best methods for obtaining such facts should elicit the earnest consideration of those upon whom devolves the duty of establishing these methods. Although the present law, relating to the registration of births, marriages and deaths in Michigan, might be greatly improved in order to become of most value to the people, still, much useful knowledge is obtained by the present system.

This is in many respects the most important part of the report, its object being to point out the locality in the State where certain diseases prevailed the most, what were the diseases that proved most fatal, at what ages they bore most heavily, at what seasons of the year they occurred, what were the surrounding circumstances, and how they compare with deaths in previous years. All these facts form an array of evidence from which reliable conclusions can be drawn for the benefit of the public health.

While the leading causes of death in Michigan are not absolutely peculiar to its own special area, there are certain diseases, more prominent than others that demand our most thoughtful consideration. These principal causes will now be taken up, classified and studied with reference to their effect upon the mortality-rate in the State.

By reference to Table 67, where the causes of death are arranged under the five general classes, it will be seen that the number of deaths, of which the causes were not returned in 1888, were 1,304, out of a total of 21,764. This number was 5.99 per cent of the total number reported as compared with 6.78 per cent in 1887, 6.12 per cent in 1886, 6.06 per cent in 1885, and 8.11 per cent in the average for ten years, 1878–1887. While this shows a marked improvement on the part of those whose duty it is to return the causes of death, it is still too high a proportion and might be greatly reduced if more care was exercised on the part of the registration officers.

The proportion of deaths from zymotic diseases was less in 1888 than for any year since 1885 and was 4.30 per cent less than the ten-year average. A low mortality-rate from the zymotic class is evidence of the absence of extensive epidemics and is a satisfactory guide as to the condition of the health of a community. Diseases of the zymotic class, while destroying more lives in Michigan in 1888 than in 1887, were nevertheless decreased in their percentage of mortality by more than two per cent. Table 69 shows some of the most prominent of these diseases.

The class of diseases called constitutional, of which consumption and cancer are the principal representatives, presented a slight increase in 1888 as compared with 1887, with regard to the percentage to deaths from all causes. It is about the same, however, as the ten-year average.

Local diseases, those affecting separate organs of the body as the brain and nervous system, are liable to marked fluctuations in their degree of fatality. These changes are influenced more by meteorological than by sanitary conditions, in which respect they are the reverse of the zymotic diseases. By reference to Table 68, it is seen that in 1888 the spring months and December had a larger proportion of the deaths.

The percentage of deaths from developmental diseases, those from old age and of infants, was more in 1888 than for either of the years 1887 or 1886 and was also greater than the average for the ten years, 1878–1887, by 3.92 per cent.

Deaths by violence were less in number and per cent in 1888 than they were in 1887,

and as compared with the average for ten years, 1878–1887, the proportion was also less. During 1888, 106 males and 7 females lost their lives by railroad accidents. Eighty-two males and 19 females committed suicide. One hundred and forty-seven males and 14 females were reported drowned. Twelve males and nine females were reported poisoned. Fifty-five persons were burned or scalded to death. Six from exposure; 32 from suffocation and strangulation; one from starvation; 14 from murder, and 364 from accidents of various kinds, compiled in Table 78 as "Casualty."

TABLE 67.—Number of Deaths returned from all Causes, from each Class of Causes and the Per Cent of Deaths from each Class, to Deaths from all Causes, for the Years, 1886–1888, and the Average for Ten Years, 1878–1887.

Causes of Death.—Classes.	18	96.	18	87.	18	88.	for 10	rage Years, 1887.
Cause of Donal, Causes.	Number.	Per Cent of Total,	Number.	Per Cent of Total.	Number,	Per Cent of Total.	Number.	Per Cent of Total,
All causes	18,187	100.00	19,482	100.00	21,764	100.00	16,822	100.00
I.—Zymotic diseases	4,639	25.51	4,873	25.01	4,994	22.95	4,584	27.25
II.—Constitutional diseases	2,963	16.30	3,085	15.84	8,527	16.20	2,787	16.27
III.—Local diseases	5,570	30.62	6,034	30.97	6,956	31.96	4,872	28.96
IV.—Developmental diseases	2,979	16.38	3,125	16.04	3,950	18.15	2,393	14.29
V.—Violent deaths	923	5.07	1,044	5.36	1,083	4.75	872	5.18
Unknown and unclassified	1,113	6.12	1,321	6.78	1,804	5.99	1,364	8.11

Attention has been called, heretofore, to Table 68, where may be seen the months in 1888 in which the deaths from all causes and from each class of causes were most frequent.

TABLE 68.—By Months, the number of Deaths returned in Michigan from all Causes and from each class of Causes during the year 1888.

	Year.				1	Mon	ths o	f De	ath,	1888,				
Causes of Death,—Classes.	1888.	Jan,	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Unk.
All causes	21,764	1416	1585	1865	1909	1858	1627	1789	2169	1978	1848	1642	2012	66
I.—Zymotic diseases	4,994	267	277	337	859	342	325	468	732	601	526	351	399	10
II.—Constitutional diseases	3,527	223	259	329	305	330	268	294	319	279	309	319	283	10
III.—Local diseases	6,956	470	598	674	701	647	522	500	533	572	516	485	720	18
IV.—Developmental diseases	3,950	308	309	350	367	342	282	305	354	313	313	307	390	10
V.—Violent deaths	1,033	71	50	71	82	81	104	89	97	96	91	82	113	6
Unknown and unclassified	1,304	77	92	104	95	116	126	133	134	117	98	98	107	12

In Table 69 are presented some of the more prominent diseases of the zymotic class for a period of twelve years, 1877–1888. It appears that the total number of deaths from these diseases was less by 74 than that returned for the previous year. The diseases showing an increase in 1888 over the number in 1887, were whooping-cough, croup, measles, scarlet fever, and small-pox, while typhoid fever and diphtheria show a decrease. The deaths from measles were greater in 1888 than for any other year of the table and were greater than the average of the period by 244. It appears to have been unusually fatal in 1888.

TABLE 69.—Deaths in Michigan from some of the Prominent Zymotic Diseases during the Twelve Years 1877-1888, and the Average.

_				Diseases.			
Years.	Typhoid fever.	Whooping-cough.	Group.	Diphtheria,	Measles,	Scarlet fever,	Small-pox,
1877	446	131	164	593	62	404	102
1878	329	132	236	887	16	429	6
1879	897	162	278	1,473	167	418	6
1880	513	264	322	1,542	125	370	3
1881	884	142	380	2,063	256	383	82
1882	463	86	849	1,416	150	592	100
1883	439	92	886	1,007	258	673	5
1884	514	160	325	1,065	144	326	3
1885	387	138	837	1,054	38	245	3
1886	498	185	400	1,117	129	319	6
1887	770	110	899	985	285	318	
1888	638	174	474	717	414	323	3
Average	523	148	333	1,156	170	400	27

In Table 70 are presented the deaths from the principal local diseases for the period of years from 1877 to 1888 and the average for those years. As may be seen there was an increase in each disease as compared with the number returned in 1887. This increase in 1888 is all the more noticeable when compared with the average. An important feature of the table is the uniform rate of increase in the number of deaths from heart disease.

TABLE 70.—Deaths in Michigan from some of the Principal Local Diseases returned for the Twelve Years 1877–1888, and the average.

			Disc	88.808.		
Years.	Convulsions.	Heart disease.	Bronchitts,	Pleurisy.	Peritonitis.	Bright's Disease.
1877	298	394	42	14	8	35
1878	288	36 8	46	16	11	32
1879	275	451	53	20	16	36
1880	34 8	482	50	26	12	80
1881	337	518	76	19	20	89
1882	356	562	106	16	21	138
1883	844	684	89	20	16	187
1884	436	718	98	18	27	179
1885	452	730	118	16	22	198
1886	431	725	97	20	32	214
1887	474	847	125	25	85	205
1888	516	961	199	46	46	210
Average	380	620	91	21	22	124

In the developmental class, as represented by the causes given in Table 71, there was an increase of 742 deaths over the number returned in 1887. The deaths from old age show an increase of 257 in 1888 over that in 1887, and also an increase of 430 over the average for the twelve years. Deaths of infants, both before and after birth, show a considerable increase over those in 1887, and an increase of 885 over the average.

TABLE 71.—Deaths in Michigan from Chief Developmental Diseases, returned for the Twelve Years 1877–1888, and the average.

			Dise	8.888. ′		
Years.	Teething.	Still-born Infantile Premature	Child- birth.	Abortion.	Puerperal Convul- sions.	Old Age.
1877	66	785	151	6	5	48
1878	60	858	161	7	3	579
1879	40	787	193	12	5	60
1880	49	808	193	6	2	62
1881	84	761	192	8		72
1882	83	890	199	9	8	64
1883	35	1,034	221	12	4	72
1884	57	1,462	222	6	4	79
1885	49	1,612	217	12	1	77
1886	75	1,542	213	7	2	86
1887	81	1,607	228	11	1	91
1888	89	2,070	243	5	1	1,17
Average	66	1,185	202	8	3	74

TABLE 72.—Deaths in Michigan from some of the Prominent Violent Causes returned for the Twelve Years, 1877–1888.

Years.	Burns and Scalds,	Poison.	Railroad Accident,	Drowning.	Freezing.	Homicide.	Suicide.	Totals.
1877	60	21	42	103	1	14	, 66	307
1878	66	27	46	117	2	11	63	332
1879	64	15	40	122	5	15	59	320
1890	64	22	40	179	8	7	65	380
1881	175	25	75	125	2	15	57	474
1882	57	22	58	140	8	11	62	353
1883	65	88	109	158		15	91	471
1884	69	16	73	150	1	24	104	437
1885	67	26	76	132	6	28	91	426
1896	58	18	72	144	5	30	82	409
1887	49	31	90	163	1	29	105	468
1888	55	21	113	161	2	14	101	467
Average	71	23	69	141	8	18	79	404

The number of deaths from some of the principal violent causes may be seen in Table 72. The greatest increase in 1888 over the average appears from railroad accidents, suicides and drowning, while from burns and soalds, poison, freezing, and homicide there was a decrease from the average.

The deaths from disorders of the brain have made a material advance in numbers since in 1877, the most noticeable of which were those from paralysis. From softening of the brain, the mortality was six more than the average for twelve years, from apoplexy 31; from paralysis 197; from insanity 8, and from cephalitis and other unspecified brain diseases the mortality was 105 more than the average.

TABLE 73.—Deaths in Michigan Returned from Brain Disorders.—Twelve Years.

Years.	Softening of the Brain,	Apoplexy.	Paralysis,	Insanity.	Cephalitis and Unspecified Brain Diseases,	Totals.
1877	29	* 85	246	17	456	833
1878	25	91	241	11	370	738
1879	25	103	262	7	400	797
1880	27	119	278	8	475	907
1881	23	110	258	10	541	942
1882	86	87	857	8	448	936
1883	22	85	845	22	439	913
1884	40	130	897	- 17	524	1,108
1885	36	116	400	24	491	1,067
1886	30	158	485	25	492	,190
1887	38	185	450	33	516	1,172
1888	87	144	558	25	583	1,842
Average	31	113	856	17	478	995

DEATHS IN 1888 GROUL'ED BY PART OF BODY DISEASED.

From Table 74 may be learned what per cent of the whole number of deaths were due to diseases of particular organs of the body for the years 1886-1888, and the average for ten years, 1878-1887. By removing the decimal point in the column of per cents one figure to the right it shows the number of deaths per thousand. Each year deaths from diseases of the lungs stand first in the order of groups presented in Table 74. The percentage of deaths from diseases of the lungs was greater in 1888 than for any other year of the table since 1885, and also greater than the ten-year average. It comprises about one-fifth of the total deaths of the State.

The next greatest ratio of deaths in 1888 occurred from the diseases of the bowels, although the percentage in 1888 was less than for any year since 1885 and also less than the ten-year average. Diseases of the throat show the most marked decrease both in number and percentage of any in the table, being 4 per cent less than the average.

TABLE 74.—Order of Seven Groups of Causes of Deaths returned for the Years 1886–1888 inclusive, and the Average for Ten Years, 1878–1887.

1	886.		1	1887.		1	1888.		Average 1878	for 10 y 3–1887.	ears,
Disease of	No.	Per cent to all causes.	Disease of	No.	Per cent to all causes.	Disease of	No.	Per cent to all causes.	Disease of	No.	Per cent to all causes.
All causes	18,187	100.00	All causes.	19,482	100.00	All causes.	21,764	100.00	All causes.	16,822	100.00
Lungs	3,598	19.78	Lungs	8,711	19.05	Lungs	4,845	19.98	Lungs	3,302	19.63
Bowels	2,215	12.18	Bowels	2,585	13.27	Bowels	2,583	11.87	Bowels	2,005	11.92
Brain	2,201	12.10	Brain	2,274	11.67	Brain	2,398	11.00	Brain	1,903	11.81
Throat	1,566	8.61	Throat	1,377	7.07	Throat	1,245	5.7	Throat	1,635	9.72
Heart	825	4.54	Heart	992	5.09	Heart	1,094	5.03	Heart	712	4.23
Kidneys	429	2.36	Kidneys	434	2.23	Kidneys	451	2.07	Kidneys	305	1.81
Liver	122	.67	Liver	155	.80	Liver	851	1.61	Liver	139	.83
7 groups	10,956	60.24	7 groups	11,528	59.17	7 groups	12,462	57.26	7 groups	10,001	59.45

TABLE 75.—Eleven Geographical Divisions of the State, with a list of Counties included in each Division.

Upper Peninsular.	Northwestern,	Northern,	Northeastern,	Western,	Northern Central,	Eastern,	Central,	Southwestern,	Southern Central.	South- eastern,
Alger.	Benzie.	Antrim.	Alcona.	Kent.	Clare.	Arenac.	Ватгу.	Allegan.	Branch.	Macomb.
Baraga.	Gr. Traverse.	Charlevoix.	Alpena.	Lake.f	Gladwin.	Bay.	Clinton.	Berrien.	Calhoun.	Monroe.
Спіррежа.	Leelanaw.	Cheboygan.	Iosco.	Mason.	Isabella.	Huron.	Eston.	Cass.	Hillsdale.	Oakland.
Delta.	Manistee.	Crawford.	Montmorency.	Muskegon.	Mecosta.h	Lapeer.	Genesee.	Van Buren.	Jackson.	W аупе.
Gogebic.	Manitou.	Emmet.	Ogemaw.	Newaygo.8	Midland.	Saginaw.	Gratiot.		Kalamazoo.	
Houghton.	Wexford.	Kalkaska. ^d	Oscoda.e	Осевпа.	Missaukee.	Sanilac.	Ingham.		Lenawee.	
Iron.		Отвеко.	Presque Isle.	Ottawa.	Osceola.	St. Clair.	Ionia.		St. Joseph.	
Isle Royal.					Roscommon.	Tuscola.	Livingston.		Washtenaw.	
Кеwеепаw.	•						Montcalm.			
Luce.				•			Shiawassee.			
Mackinac. b										
Marquette.										
Menominee.	-									
Ontonagon.										
Schoolcraft.										

No returns of deaths from the following townships:

* Detour and Drummond.

* Bitchmond.

* Thompson.

d Springfield.

e Atherton, Big Creek, Comins, and Harmon. t Chase and Lake. g Beaver and Brooks.

DEATHS 1888, BY CLASSES OF CAUSES, BY DIVISIONS OF THE STATE.

The following table presents a view of the mortality of the State in eleven different sections, or geographical divisions, whose characteristics are more marked than those by counties. It must always be a subject of general interest to know the comparative healthfulness of the different parts of Michigan, and Table 76 gives this information for the year 1888.

The largest proportion of deaths in the State as a whole, was caused by local diseases, and the smallest by violent deaths. In the Upper Peninsular and northeastern divisions of the State, the largest proportion of deaths was from zymotic diseases, while in all the other divisions the largest percentage of deaths was from local diseases.

Based upon the population in 1884 and the deaths in 1888, it is seen that the deathrate has diminished from that in 1887 in the northwestern, northern and central divisions, and has increased in all the others. The southeastern division, which shows the highest death-rate in 1888, includes the county of Wayne and the city of Detroit, where the registration of deaths is more full and complete than in many parts of the State.

As in 1887, the central division shows the lowest death-rate in 1888 of all the eleven geographical divisions and the southeastern the highest.

The Upper Peninsular and northern divisions of the State show the largest proportion of deaths from unknown and unclassified diseases.

The various diseases included in each of these classes, and the counties in which they occurred may be seen in Table 77.

TABLE 76.—Exhibiting, by Geographical Divisions, the Number of Deaths, the Per Cent of Deaths in 1888 to Population in 1884, the Per Cent of Deaths for each Division to Total Deaths for the State, and the Per Cent of Deaths from each Class of Causes to Deaths from all Causes.

	repre-	Deaths r		1888 to	cau		deaths	from a from a sion.		
State and Geographical Divisions.	Population June 1, 1884, sented by deaths in 1888.	Number.	Per cent of total,	Per cent of all deaths in Population in 1884.	Class I, - Zymotic dis-	Class II,—Constitutional diseases,	Class III Local dis- cases,	Class IV.—Development- al diseases.	Class V.—Violent deaths.	Unknown and unclassi- fied,
State	1,845,778	21,764	100.00	1.18	22,95	16.20	31.96	18.15	4.75	5.99
Upper Peninsular	114,718	1,753	8.05	1.53	30.01	8.38	23.56	18.08	8.39	11.58
Northwestern	55,200	610	2.80	1.11	18.53	10.49	82.79	21.64	6.39	10.16
Northern	46,297	391	1.80	.84	19.18	19.95	31.71	13.04	6,91	9.21
Northeastern	36,597	368	1.69	1.01	34.81	9.51	23.36	16.57	5.70	10.05
Western.	208,779	2,165	9.95	1.04	21.06	16.81	34.09	17.88	5.08	5.08
Northern Central	71,413	686	3.15	.96	22.59	15.45	30.76	15.45	7.00	8.75
Eastern	291,713	2,959	13,60	1.01	22.98	15.95	29.98	18.66	5.98	6.45
Central	299,364	2,347	10.78	.78	19.26	19.13	37.24	16.32	4.26	3.79
Southwestern	127,985	1,278	5.85	.99	21.05	18.93	35.11	16.42	4.01	4.48
Southern Central.	299,000	2,885	13.26	.96	18.37	19.41	37.50	16.78	3.92	4.02
Southeastern	294,712	6,327	29.07	2.15	25.46	15.98	29.94	20.04	3.16	5.42

Exhibiting the Number of Reported Deaths in Michigan, and in each County of the State, during the Year 1888, from Specified Causes. Statistically Classified (Still-births Included). TABLE 77.—CAUSES OF DEATH.—Nosological Arrangement.

		- '		1								Con	nti	9 8	18	888										
Causes of Death, 1888.	State.	Alcona,	Alger.	Allegan,	Alpena,	Antrim,	Arenne,	Baraga,	Barry,	Bay.	Jenzie,	Berrien,	Galhoun,		Charlevolx,	Спероудап,	Chippewa,	Clare,	Chnton,	Orawford,	Delta,	Eaton,	Emmet,	Genesee,	dladwin,	
All Causes	21,764	83	15	423	111	92	8	94	177	181	52	335	255	1 188	172	16	103	63	79 237	-	7 16	165 296		96 270	14	4 168
Specified Causes.	20,537	22	13	407	108	133	1 53	4	172	120	200	816 2	252	368	091	4	65	29	72 227		15	153 291	18	7 265	1	11 148
Causes not Specified	1,227	1	64	16	6	4	10	60	10	22	60	10	02	91	12	*	7	*	7	10	50	129	10	œ.	NG.	62
CLASSES,																	-				_					-
IZymotic Diseases.	4,994	-	12	Ξ	15	15	10	20	29 1	113	10	12	43	1.1	24	#	88	30	10 8	88	10	51, 64	N.	6 45	10	45
II.—Constitutional Diseases.	8,527	7	1	77	7	41	12	63	88	88	9	19	22	8	37	13	13	13	9	47	-	17 52	88	57	-	11
III,—Local Diseases	6,956	6	-	184	53	30	12	12	66 1	127	21 1	20	102 1	233	288	71	62	17 2	84 84		0.0	87 118	34	11		52
IV.—Developmental Diseases	8,950	4	1	71	17	10	9	-	30	96	12	88	65	99	81	9	12	-	15 46	9	90	4	1 61	13 40	-	88
VViolent Deaths	1,088	00		13	00	1	63	9	00	62	=	=	00	19	10	*	7	4	1 1	-	7	14 13		00	1	22
Unclassified	11	1	1	H	1	-	-	1	=	1	1	-	+	64	1	1	4	93	1	1		03	-	00	2	-
ORDERS.									-	-	-	_	-	_	_	_	_				_	_				_
L-1. Miasmatic Diseases	4,950	+	12	110	21	2	10	20	29 1	112	10	7.4	62	47	75	*	88	20	10 38		1 2	50 63		6 45		42
2. Enthetic Diseases	. 15	-1	1	1	1	Ħ.	-	1	1	+	-	-	- 1	1	1	- 1	1	1	1	1	- 1	1	4	1	1	-
3. Dietic Diseases	. 21	1	1	+	i	i	1	1	1	1	1	1	-	1	-	1	- 1	1	-	1	_	-	H	1	-	- 1
4. Parasitic Diseases	00	1	-	1	i	i	T	1	1	+	:	1	1	- 1	-	-	1	-	1	1	-	-	1	1	1	- 1
II1. Diathetic Diseases	- 984	1	1	88	-	*	00	-1	21	19	-	138	17	31	11	*	62	61	. 17	-		25 15		1 17	1	
2. Tuberenlar Diseases	2,543	9	-	49		10	6	03	17	49)C	02	38	09	36	9	11	11	9 30	0	-	15 87	22	40		10

	* 000			66		-						-				•		1						13		
2. Diseases of Organs of Circulation	1,082	1	1	1	1		-	00	20	*	17	22	88	17	63	0	10	9	50	1	67	30	-	18	-	63
3. Diseases of Respiratory Organs	1,895	23	i	53	10	6	6 5	20	42	64	30	21	32	10	60	10	*	9	20	1	6	22	6	36	7	-
4. Diseases of Digestive Organs	1,004	H	i	23	-		-	2 18	.82	0.1	19	00	21	=	63	99	1	01	=	-	6	13	9	13	1	07
5. Diseases of Urinary Organs	455	63	H	=	3	00	-	20	10	00	6	12	12	7	1	1	1	F	7	1	-	00	-	4	1	27
6. Diseases of Generative Organs	- 28	1	+	1	-	-	1	1	63	1	1	1	1	-	1	1	i	Ĭ	H	1	1	02	1	+	+	116
7. Diseases of Organs of Locomotion	10	1	1	1	1	1	1	1	1		1	1	1	1	Ì	1	1	i	1	1	1	1	1	1	1	
8. Diseases of Integumentary System	139	1	1		-	-	1	-01	4	-	03	6/1	67	43	1	1	1	н	10	ī	-	4	-	61	1	-
IV1. Developmental Diseases of Children	2,180	60	1	58	16	-	4	11	47	9	27	19	24	6	9		63	13	83	1	25	28	00	20	1	13
2. Developmental Diseases of Women.	259	i	1	10	-	=	1	00	9	-	1	-	9	64	H	H	1	-	4	1	60	+	-	9	1	7
3. Developmental Disease of Old People	1,174		-	22	1	20	1	12	14	KG.	20	19	24	15	63	4	1	-	139	1	**	16	*	125	+	
4. Diseases of Nutrition.	387	-	1	*	-	1	1	-	23	-	- [4	63	10	1	1	H	1	H	1	1	4	1	63	-	21
V.—1. Accident or Negligence	199	00		10	+	4	-	89	72	-	*	9	125	7	00	6	+	60	4	Πİ	-	00	63	69		00
3, Homicide	14	-	-	1	1	-1	1	- 1	1	- 1	-	i	1	-	i	1	1	1	1	-	H	1	- 1	1	+	105
4. Snicide	101	1	1	-	1	- !	1	-		- 1	63	-	23	00	i	1	1	00	H	1	60	63	*	+	+	
5. Execution	-	1	1	1	-1	1	1	- 1	1	1	1	1	1	1	1	1	1	1	i	1	1	1	1	+	Ť	
6. Violent Deaths	364	i	*1	-	*	100	1 88	-	00	1	10	1	4	67	-	1	00	જા	9	1	4	7	H	4	1	13
CLASS L.—Zymotic	4,994	*	12	H	19	15 10	0 20	29	112	10	75	43	47	55	*	88	20	10	39	H	21	19	9	42	+	45
I.—Order 1. Miasmatic.	4,950	4	12	011	12	14 10	0 20	29	112	10	74	42	47	24	4	88	20	10	88	н	20	63	9	45	4	45
1. Small-pox	9	1	1	1	1	-	1	-	1	1	-	-	1	1	1	i	1	1	-	+	1	1	1	1	1	
2. Measles	414	1	-	00	17	-	63	-	10	63	4	. 1	23	99	1	-	7	-	10	1	4	=	i	63	1	-
8. Scarlatina	323	-	1	-	03	-	į	1	đ.		1	1	0.3	-	1	10	=	1	1	1	1	00	1	43	-	00
4, Diphtheria	717	1	7	00	-	67	10	4	6	1	18	60	4	00	1	7	9	-	-	1	10	-	1	-	1	23
5. Quinzy	. 18	1	-	1	1	-	1	1	1	1	1	1	1	-	1	1	H	1	i	1	1	1	1	1	1	0.
6. Croup	474	1	1	-	4	2	i	1	10	=	03	-	1	60	1	00	-	1	1	1	10	4	1	90	H	13

TABLE 77.—Continued.—Causes of Death, Classified.

*											0	oni	Counties,		1888.										
Causes of Death, 1888.	State.	Alcona.	Alger.	Allegan.	Antrim.	Агепас.	Вагада.	Berry.	Вау.	Benzie.	Berrien.	Branch.	Calboun.	Cass.	Charlevoix.	Cheboygan.	Сріррежа.	Слаге.	Clinton.	Crawford.	Delta.	Eston.	Emmet,	Белевее.	Gladwin.
7. Whooping-cough	174	63	- 1	97	20			1	90	03	20			1		10	64	j		1	-	-		1	
(Typhoid Fever	642	1	-	27	03	-	16	6	03	1	83	10	10	9	- }	7	-	93	6	1	17	10	63	7	
8. Typhus Fever	93	1	1	1	1	0	-	1		- 1	1	-	-1	-			-	-	1	1	1	1	-	-	- 1
Typho-malarial Fever	31	1	. !	- 1	-	1	1	-	62	1	-	1		-	1	1	-	-		-	1	62	-		- 1
9. Erysipelas	239	1	1	-	1			4	23	1	4	-	00	1	1	1	- 1	- 1	60	- }	1	93	- 1	43	. :
10. Puerperal Fever.	26	1	1	1	- 1	1	4	1	80	1	1	1	-	1	1	1	-	1	-	-	-	1	1	63	- 1
11. Carbuncle	सं	-	1	1	1	1	1	- }	į	1	-1	-		1	-	-	1	-	1		-		-		1
12. Influenza.	7	1	1	1	1	1	1	1	-		- [-		-	1		1		1	1	1	I	-		- 1
13. Dysentery.	158	1	1	10	-	-	1	-	9		- 1	7	83	1	1		1	-		- [1	-	-	00	
14. Diarrhea	871	1	-	п	9			4	16	1	-	1		1	1	43	-		1	1	10	62	1	*	1
15. Cholers Infantum	787	1	63	18	00	9	-	03	15	-	K	Da	14	23	1	4	1	-	00	-	=	11	23	00	
16. Cholera Morbus	52		1	-	-				67				-		1	63	-	-			-			-	1 1
17. Ague	197	1	-	9	- 1	- 4	1	1	90	1	20		10	1	-	-			1	-		-	1	00	
18. Remittent Fever	158	-	- 1	9	-	-	1	1	7	1	64	-	-	63	-	1	63	- 1	24	1	- 1	00	1	10	-1
19. Rheumatism	154	1	1	*	-	57	1	6.3	6.3	- 1	23	00	1	00	- [1		-	1	-	1	9	1	1	1
20. Leprosy.			1	1	- 1	-	1	1	1	1	1	1		1	1	1	1	1	1	1			1		
Г.—Овркв 2. Enthetic	15.	1	+	- 1	1	-	1	1	1	1	-	1		1	-	-			1	- 1	-	1			- 1
1. Syphilis.	14	-	1	- 1	1	1	-	- 1	1	1	-		- 1	- {	1		-	- 1	1	- 1	i	1	-		- 1
2. Stricture of Urethra		1	+	1	1	-	1	1	- [1	1	- 1			1	1	1			-	1	1		- 1	- 1
Stricture		-				-																		Т	_

3. Hydrophobia	-	1 1	1 1	1 1		1	- 1				1 1	1	H			1 1	1 1	1 1	17	17	1 1			1 1	1 1
I,—Order 3. Dietic.	21	-	0	-					- 1		- 1	-	Ť	-	-	+	+	- 1	1	-			- 1		- 4
T. Frivation.		1 1	1 1	1 1			1	1	1	i		1	1	1 1	1 1	1 1	- 1	1 1			1	-			
2. Rachitis	-	:	1	1	1		1	1	-		i	T	-	+	+	+	+	-	1	1	1			-1	
Sourvy		1	-	1	1	1	1	1	1	İ	İ	Ť	+	t	1	÷	1	+	1	1	1	1	1	1	1
3. Delirium Tremens (Alcoholism)	9	1	1	-	-	1	-	-	1	1	i	Ť	1	÷	1	÷	+	÷	1	1	i		ì	1	1
4. Intemperance	13	1	1	1	1	1	1	1	1	i	1	H.	1	Ť	+	+	1	1	-	-	_	1		1	b
5. Opium Eating	7	1	1	4	1	1	1	1	1	Ì	i	i	i	+	+	÷	1	+	+	1	i		1	1	1
I.—Order 4. Parasitic	90	- 1	- 1	- 1	- 1	j	i	-		1	1	i	1	1	+	+	- 1	+	- 1	- !	į		i	- 1	4
1. Thrush	60	1	1	1	- 1	- [1	1	1		1	1	-	+	- 1	÷	1	+	-	1	į		1	- 3	-
2. Worms	2	1	-	4	1	j	- !	1	1	i	i	1	1	1	1	+	+	+	1	- 1	- 1	1		i	4
3. Disease of Scalp.	-	1	1	1	1	1	1	1		T	1	÷	1	+	+	+	-1	+	1	1	1			1	1
CLASS II.—CONSTITUTIONAL	8,527	1	1	E	7 14	12	64	86	68	9	19	ig.	16	55	13	13	13	D	47	17	52	83	57		11 11
П.—Овржи I. Diathetic	188	-		88	-	8	- 1	21	19	-	18	17	31	=	+	01	63	- 1	17		2 15	-	17	- 1	
1. Gout	******	1	1	1	1	1	1	1	1	İ	1	Ť	1	÷	+	+	1	1	1	1	1	1	1	- [1
2. { Anemia Dropsy	3,462	1	1	15	11	1.		- "	10	11	101	9	1 4		60	-	50	1 1	: 2	1 "	. 23		10	1 1	1 1
3. Canoer.	480	+	-	139	3	63	-	10	4	-	00	=	16	NO.	7	-	+	1	49	1	13	1	12	1	
4. Noma (Canker)	21	1	- 1			63		1	0		1	1	1	1	1	+	1	1	1	1	-1			- 1	1
5. Mortification	18	-	+	1	1	1	1	1	1	1	1	-	-	1	-	1	+	-	1	1	-	1	1	1	1
II.—Order 2. Tubercular	2,543		-	64	9 10		9	17	49	10	4	88	99	26	6	=	11	O.	30	. 15	37	27	9		10
1. Scrofula	23	1	1	- !	- 1	1	1	1	1	1	1	1	i	1	+	+	+	1	-	- !		1	-	1	- 1
2. Consumption of the Rowels	18			0		1		-			6	6		3	1		-	;	63				-		

TABLE 77.—Continued.—Causes of Death, Classified.

												5	Countie	8 9	199	ò										
Causes of Death, 1888.	State.	Alcona.	Alger.	Allegan.	Alpena.	Artrim.	Ателяс.	Baraga.	Вату.	Benzie.	Berrien.	Branch.	Calhoun.	-	Cass.	Cheboygan.	Chippewa	Clare.	Clinton.	Crawford,	Delta.	Eaton.	Emmet.	Оепевее.	Gladwin.	
3. Phthisis (Consumption of the Langs)	2,451	9	1	46	9	10	0.	23	16	48	10	7	36		56	6	=	7	83	88	1	15.	98	65	88	-
4. Hydrocephalus. 5. Marasmus	8 08		1 1	11	11	11	11	1 1	1 1	1 1	1 1	1 1	1 1	4 1	1 1	1 1	1 1	1 1	1 1	1 +	1 1	1 1	1 1	1-1	11	1 1
CLASS III,—LOCAL DISEASES	6,956	6	7	134	25	98	12	12	1 2	157	21 12	120	103	153	28	14 2	22	17 28	8	75	02	37 11	113	34 114	-	10
III.—Order 1. Nervous System.	2,345	60	-	41	13	8	*	4	81	47	6	52	37	25	10	-	6	7	12 2	50	22	15 3	28	10	11	60
1. Cephilitis	405	1	- !	10	63	- 1	-	- 1	02	6	-	*	NO.	63	- 1	23	0.3	63	-	00	-	-	01	01	00	-
2. Apoplexy	144	1	1	**	1	-	1	-	63	0.3	-	9	00	10	÷	-	-		-	-	-		00	_	00	-
3. Paralysis.	572	-	- }	12	63	04	0.3	1	10	-	00	202	18	88	00	-	63	-	-	00	-	-	15	1	12	-
4. Insanity	26	1	1	-	1	H	1	1	+	1	=	1	1	+	1	1	+	- 1	-	- 1	1	1.	-	- 1	-1	1
5, Chorea	64	1	-	1	1	1	1	1	1	-1	-	1	1	- 1	-	1		- 1	1	1	1	1	-!	1	-	18
6. Epilepsy	65	1	1	н	1	+	1	+	1	-	-	21	-:	-	-	53	- 1	-	1	- 1	-	-	H	н	-	-
7. Tetanus	7	1	1	1	i	1	-	1	-	:	- 1	- 1	- 1	+	1	1	1	1	-	1	1	1	1	- 1	-	-
8. Convulsions	516	1	1	yG.	=	1	- {	п	62	10	-	-	00	-	1	-	-	-	10	1	60	-	7	9	63	
9. Srain Disease	375	1	-	90	10	4	1	1	60	12	-	10	9	139	-	1	01	00		+		4	4	-	99	-(
(Dropsy of Brain	930	1	1	}	99	1	4	1	-	200	1	1	1	1	1	1	-	1		-	,	-	1	,	-	1 1
10. Spinal Fever	74	-	-	-	i	+	1	1	1	01	-	1	-	-	-	1	1	1	1	62	1	-	63	-	00	00
11. Spotted Fever	1	1	1	-	+	1	i	+	+	+	1	1	1	1	+	1	1	1	1	1	1	+	1	1	1	1
12. Meningitis	42	1	1	-	1	1	1	60	1	+	1	1	-	+	1	1	1	- 1	-	+	1	-!	+	1	1	-
13. Meningitis, Cerebro-spinal	13	1	1	-	1	1	1	1	1	-	+	1	1	-	1	1	1	-1	1	1	1	+	1	1	1	100
14. Meningitis. Spinal	63			63		-	-	-		60		-	-	-	_	_	_	_	-	_		-		_	-	_

													:	-	-	-	-	-		1	-	-	-	-	-	
16. Spine Disease		-	-	:	:	1	1	1	1		1		1	1	- 1	- :	+	- 1	:	1	1	-	1	1	f	1
17. Spine, Inflammation of		1	-	-	į	- 1	1	i	1	1	- 1	-	- 1	- 1	- 1	- :	1	- 1	- ;	- 1	1	1	1	j	- 1	-
18. Frightened.		1	-	-	1	1	1	1	1	1	1	+	- 1	- 1	1	+	+	+	+	1	1	1	i	1	1	1
IIIOnder 2. Organs of Circulation	1,082	-	23	i	10	-	-	00	20	4	1	61	65	17	63	10	ю	9	20	-	63	88	-	18	-	62
1. Pericarditis	88	1	-	;	1	i	i	1	- 1	-	E92	00	00	10	0.1	-	1	:	-	- 1	1	9	24	61	1	- 1
2. Aneurism	27	1		1	1	1	i	1	-	1	+	- 1	1	1	- 1	1	- 1	-	- 1 Y	1	1	23	1	1	1	1
8. Heart Disease	828	-	. 20	-	73	-	-	02	18	03	12	13	30	12	-	*	10	10	19	1	63	22	103	16	-	60
4. Emboli		1	1	-	1	1	1	1	1	1	-	÷	+	1	+	1	-1-	-	+	+	1	1	1	1	1	1
III.—Order 3. Respiratory Organs	1,895	60	29	10	6	9	IU.	30	42	69	30	21	22	10	60	10	#	9	20	-	6	52	6	98	-	7
1. Epistaxis		-	1	- 1	1	1	1	1	1	1	1	- 1	- 1	- 1	-1	- 1	- 1	- 1	- 1	- 1	1	1	1	1	-	1
2. Laryngitis	10	1	- 1	1	-	1	1	1	1	1	- 1	- 1	-1	+	-	1	- 1	1	1	1	1	-	-	1	1	1
3. Bronchitis	211	1	63	*		-	10	01	-	- 1	-1	=	601	+	;	-	03	H	1	+	1	1	1	-	1	-
4. Pleurisy	48	1	1	- 1	1	i	i	1	00	1	64	1	- 1	!	-	1	- 1	:	1	1	1	1	-	=		-
5. Pneumonia	1,301	-	19	10	00	10	1	130	26	24	200	17	24	6	-	00	-	-	17	- 1	æ	20	1-	22	-	5
6. Asthma	65	1	1	1		i	1	-	63	1	00	1	- 1	+	- 1	- 1	-	н	-	1	1	-	1	02	1	1
7. Lung Disease	539	-	00	1	1	:	1	99	10	1	90	93	9	н	-	-	1	-	90	1	-	-	-	9	1	00
8. Catarrh	83	+	-	1	1	Ì	1	-	1	1	64	+	1	+	-		-	1	+	1	1	+	i	1	1	1
IIIOrder 4. Digestive Organs	1,004	-	. 23	1	90	=	63	18	62	67	19	00	22	=	60	02	-	43	=	-	5.	13	9	125	- 1	-01
1. Gastritis	73	- 1	1	1	00	1	1	- 00	60	3	63	1	-	-		-	- 1	1	- 1	1	+	1	1	03	1	1
2. Enteritis	890	1	7	1	-	- =	H	10	16	-	00	673	00	90	-	-	-	60	-	-	-	00	00	10	1	-
3. Peritonitis	46	1	-	1		1	-	i	-	1	-	- !	- 1	- !	- 1	1	- !	- 1	-	1	1	1	1	-	1	1
4. Ascitis.	*	1	_	1			i	1	- 1	+	1	1	1	-!	- 1	1	-1	1	1	1	1	1	1	1	1	- 1
5. Ulceration of Intestines	п	1	1	1			1	1	1	;	=	1	-	1	- 1	-	-:	1	+	1	1	H	i	1	1	1
6. Hernia.	37	-	00	1		1	1	-	- 1	- 1	1	-	-	-	-	- 1	- 1	1	1	1	1	1	1	63	1	1
7 Obstraction of Demale	•									_			-	_		-	+	+		-	-					

TABLE 77.—Continued.—Causes of Death, Classified.

												Ö	oun	Counties,	-	888						•					
Causes of Death, 1888.	State.	Alcona.	Alger.	Allegan.	Alpena.	Antrim.	Атерас.	Baraga.	Barry.	Вау.	Benzie.	Berrien.	Втапсь.	Calhoun.	Cass.	Срагдечоіж.	Срероувал.	Сһіррема.	Clare.	Clinton.	Crawford.	Delta.	Eaton,	Emmet,	Gеnевее.		Gladwin.
8. Intussusception	1	-		- [11			1	- 1	-	1	-1	1	1	1		i	i	1		- 1	1	1	1	1	- 1	- 1
9. Stricture of Intestines.	80			1 1		1 1		1 1	1 1		11		1 1	64	1			1 1	1 1			-11	1 1	1 1	1 1		1 1
11. Stomach Diseases	179	- 1	- 1	7	1	٦,		1	4	7	63	61	-	4	-		1	-	1	65			-		64	=	1
12. Pancreas Diseases	Take .		1	1	1	1		-	-	1	1	1	-	-	- 1	1	1	!	1	- 1	-1	-	- 1	1	- 1	- 1	- 1
13. Hepatitis	13	-	1	-	1	1		1	1	1		1	-	63	-	1	1			- [- 1	1	-	1	-	+	4
(Biliary Calculus	******	1		1	1	1	1	1	1	1	1	1	-	1	1	-	1	1	-	1	- 1	-		1	- 1	-	- ;
Jandice	26	1	1	1	- [1	1	1	1	-	- 1	1	1	63	2/1	1	1	1	-	- [1	1	-	-	+	+	;
15. Liver Disease	138	-	1	00	1	-	i	1	00	9	1	*	60	00	-	1	- 1	i	1	44	64	_	63	99	1	+	- 1
16. Spleen Disease	*	1	:	1	-1	-	1	1	- 1	-	- 1	- 1	- 1	1	1	1	1	1	-	1	- 1	- 1	1	- 1	1	- 1	1
17. Bowel Diseases, etc	63	-	-	0.0	- 1	1	1	1	-	-	-	1	#	02	1	-	- 1	1	1		-	1	1	1	-	-	;
18. Month Disease	7	1	1	1	-	1	1	1	-		1	1	i	- 1	2/1	- 1		1		1	1	1	+	1	+	+	- 1
III.—Order 5. Urinary Organs	455	23	-	11	1	00	1		10	10	00	6	12	12	7	-	- 1	1		7	1		-	30	-	+	- 1
1. Nephritis 2. Tachnris	81	1			1			1	1	7		-	1	1	1			1		Y	-	1		-	+	-	1
8. Bright's Disease of Kidneys.	210			7		6.3		1	00	9	63	*	10	7	63						- 60		-	4		-	1 1
4. Diabetis	7.1	- (1	1	-	-		1	-	-		23	4	1	-	1	- 1	1	1		1	b	-	99	н	03	- 1
5. Calculus (Gravel, etc.)	11	-	1	1	1	1	1	1	1	1	1	1	- 1	-	1	1	-{	- [1	1	1	- 1	-	-	-	+	1
6. Cystitis	22	1	1	1	1	1	1	1	1	1	1	- !	-	1	- 1		1	- 1	1	- 1	1	1	1	_	-	- :	- 1
7. Kidney Disease	124	27	1	4	-	1		- 1	1	27		63	00	99	cra		-	-			01				-	-	1

III.—Orden 6. Generative Organs	26		1	1	-	v-leas	1	1	T			-	-	•	-		i	1	÷		T	0		-	1
(Ovarian Disease	-		1	1	1	1	- 1	1	-	- 1	1		1	1	-			1	1	-	1	+	-	- 1	- 1
1. Ovarian Tumor	00		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	63	-	1	+
2. Disease of Uterus.	18		i	1	1	1	1	- !	- 1	03	1	1		-			1	1	H	+	+	-	- :	-!	- 1
3. Hydrocele	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	İ	ì	1	+	+	+	+	+	+
IIIOrden 7. Organs of Locomotion.	10	-1		-	1	1	1	-1	!	- 1	-	1	-		1	-	i		1	1	-	+	-	- 1	-7
1. Arthritis	1	-		1	1	- 1	- 1	- 1	-	- 1	- 1	-{		- 1	1		-	1		+	1	- ;	+	- 1	- 3
2. Joint Diseases	10	-	1	1	1	1	+	1	1	1	1		-	1	1	- [1	i	1	1	1	1	+	1	+
III,-Order 8. Integumentary System	139	- 1	- 1	-	-	-	-	1	63	4	22	63	94	63	1		1	+	10	1	-	-	-	03	1
1. Phlegmon	49	1	1	63	1	-	- 1	}	=	- 1				1			1	-	04	-	1	1	-	-	- 1
2. Ulcers	80	- [1	1		1	1	-	1	1			į	1			i	T	1	-	=	1	- 1	- 1
3. Skin Disease	88	-		0	-	-	+	1	-	-	1 2	94	1	1	1	1	1	+	00	-	-	99	1	-	+
CLASS IV.—DEVELOPMENTAL DISEASES	8,950	7		11	17	10	0	*	30	90 12	48	43	56	31	0	12	50	15	46	-	65	67	13	40	1 28
IV,-Order 1, Diseases of Children	2,180	93	- 1	32	16	-	+	-	4	-	87	19	12	6	8	7	69	13	88	1	22	88	00	50	18
1. Still-born	1,358	93	1	19	9	F	-	63	60	31	5 14	11	16	+	23	60	1	œ	17	1	00	16	-	0	00
(Infantile-	643	- {	- 1	12	0	1	4	60	8	10	1 18	9	6	No.	6.3	00	93	4	6	1	12	10	-	-	1
?. \ Premature Birth	- 69	1		-	1	- 1	1	1	1	69	1	62	63	1	-	1	-	1	- i	1	1	40	1	62	+
3. Cyanosis	23	1	1	1	1	1	+	1	1	1	1	- 1	1	-	1	1	1	1	1	1	1	1	- 1	1	1
4. Spina Bifida	00	- 1	- }	1	1	1	1	- 1	-	-	1	1	-	1	1	1	1	H	1	1	1	1	1	+	+
5. Other Malformations	11	1	1	1	-	1	1	1	1	-	1	1		1	-	-		1	i	1	1	+	1	-	-
6. Teething	88	- 1	1	1	1	1	1	-	1	+	1	1	1	i	1	27		1	÷	1	10	+	1	+	+
7. Injury at Birth	10	1	1	1	i	1	1	+	1	1	1	1	-	1	1	1	1	1	1	1	1	+	+	1	-
IVORDER 2. Dev. Dis. of Women	259		-	10	1	-	-	1	60	9	-	-	9	64	-	-	-	-	4	1	60	H	-	9	-
, (Dysmenorrhea	1	1	-	i	1	1	1	1	1	-	1	-	-	;	1		-	1	i	1		1	+	+	+
Turn of Life	7	8	10	1						-		-	Ĭ						H		8	-	3	-	-

TABLE 77.—Continued.—Causes of Death, Classified.

												ప	ono	Counties,		1888.											
Causes of Death, 1888.	State.	Alcona.	Alger.	Allegan.	Alpena.	Antrim.	Агепас.	Ватаgа.	Barry.	Вау.	Benzie.	Berrien.	Вгапср,	Calhoun:	Cass.	Charlevoix.	Cheboygan.	СМрреча	Clare.	Clinton.	Crawford.	Delta.	Eaton.	Emmet.	Genesee,	Gladwin.	Gogebie.
(Child-birth	246	_	i	7	1	-	-	-	09	10	1	-	H	9	01	1	1	1	-	4		90	1	-	6		7
2. Abortion		i	1	-	-	1	- 1	1	1	1	- 1	1	-	- 1	-	1	. 1	1	- 1	-		1					
Uterine Hemorrhage				1	1		1	1	-	1	- 1	1	1	1		-	1	1	1	1	1	1	1	1		1	. 1
IVOrder 3. Dov. Die of Old People	1,174	1	_ 1	27		93	-	- 1	12	17	10	20	19	24	15	61	4	- 3	-	13	- 1	4	16	4	12	- 1	
1. Old Age	1,174	i	1	22	-	00	H	1	12	14	10	30	19	22	15	30	4	1	-	13	-	*	16	4	12	1	
IV.—Order 4. Diseases of Nutrition	887	-		4	-	- 1	1	- }		233	-		4	23	10	1	1	-	i	-		-1	4	- 1	41		30
1. Atrophy and Debility.	837	-	1	*	-	1		1	-	23	-	1	4	63	10	- 1	- 1	-	1	-			4		63		60
CLASS V.—VIOLENT DEATHS	1,033	23		13	00	7	20	9	90	32	-	11	00	19	10	4	7	4	Π	11	1	17	13	00	7	-	27
VOrden 1. Accident or Negligence	254	03	1	10	4	4	-	00	8	24	-	-	9	12	*	93	7	-	9	4	1	7	90	21	63	1	00
1. Fractures and Contusions	138	23	1	-	-	-	1	1	- 1	00	1	- 1	1	63	-	- 1	63	1	-	c.i	- 1	4	-	-	1	1	65
2. Wounds	Z	- 1	1	-	1	1	-	I	1	1		1	1	-	-1	- 1	1	1	1	64	Į	-	1		1	-	-
3. Burns and Scalds.	28	1		-	1	1	-1	I i	- 1	-	1	1		1	1	1	1	.	1	1		1	- 1		1	1	63
4. Poison	8		d	1		-	1	1	1	1	- 1	H	1	90		-	-		1	1	1	1	1	1	1	1	-1
5. Drowning.	161	- !		-	00	-	1	1	4	15	-	00	92	4	1	1	4	-	1	1	- }		1		1	- 1	1
6. Suffocation	87	1	1	1		-	1	-	н	-	1	1	-	1	1	1	1	1	1	1	- 1	1	- [-	1	- 1	1
7. Otherwise.		1		1		-	1	01	-	4		1	-	00	1	-	-	1	69	1	1	63	1	-	1		94
V.—Order 2. In Battle			- 1	- [- 1	- 1	- 1		- 1	1			1	- 1	- 1		-	- 1	-	1	- 1	- †	į	- 1	- 1	- 1	- 1
V.—Order 3. Homicide	77	- 1	1	1	1	1	- !	1	1	-	1	- 1	. :	7	П	1	1	1	1	1	- 1	1	-		-	- 1	- 1
1. Murder		į	- 1	1	- }	1	-			-			- 1	-	-						- 1	7	-		1		-

Α.	VOrder 4. Suicide	101	1	-	1	1	-	1	4	-	1	4	-	10	:	1	:	;	02	-	1	.0	93	1	+	1
	1. Wounds	12	-	1	1	1	1	İ	1	1	+	+	-1	69	1	+	-1	- 5	- 1	1	1	-:	=	- 1	1	-
	2. Poison	00	:	-	1	- 1	i	- [-	-	1	+	1	:	-	- 1	1	- 1	+	- 1	1	- 1	- 1	1	1	- 1
	3. Drowning	+	1	-	1	- 1	1	1	i	- 1	+	7	+	1	-	1	1	1	1	+	- 1	1	1	+	1	-
2	4. Hanging	14	1	1	1	1	1	1	1	1	- 1	1	1	1	-	-	1	:	н	-	1	-	- 1	- 1	+	-1
1	5. Otherwise and not Specified.	89	-	1	1	1	1	1	1	1	1	н	-	-1	-	1	+	1	63	+	1	-	-	- 1	+	- 1
Λ.	V.—Order 5. Execution.	-		1	- 1	1	1	1	1	* ;		;	-1	- :	- 1	-1	1	- 1	- 1		- 1	-	-	- 1	- 1	- !
	1. Hanging.	***************************************	1	1	-	i	-	1	+	1	+	1	- 1	+	-	+	-	+	+	+	1	1	+	+	1	+
V.al	VOrder 6. Violent Deaths not included above	364			4	00	1	an)	-	00	1	ko.	-	4	67	-	-1-	93	61	9	1	4	-	H	4	13
UNG	UNCLASSIFIED	11	1	-	1	-	1	1	1	1	1	-	-	63	1	+	1	0.0	1	- 1		63	1	00	62	1
	1. Head Disease	00	1	1	1	İ	-	1	1	1	1	- 1	1	1	1	- 1	1	- 1	3	1	-	1	1	+	+	+
	2. Hemorrhage	30	1	- [1	i	-1	1	1	1	1	1	-	63	1	- 1	-	1	- 1	1	1	1	1	00	6.3	+
	3. Inflammation.	40	1	-	- 1	1	-	1	-	- 1	+	1	1	1	1	- 1	1	63	- 1	÷	1	1	+	+	1	-
	4. Otherwise.	4	-	-	1	i	1	i	1	1	1	-	+	-	1	1	1	- 1	1	+	-	-	-	- 1	1	- !
Cau	Causes not Specified	1,227	1 2	16	6	*	10	63	KG	22	63	13	00	16	12	4	11	4	-	10	00	12	10	6	10	25

TABLE 77.—Continued.—Causes of Death, Classified.

							-					Con	Counties,	3, 18	1888.					- (
Causes of Death, 1888.	Gd. Traverse.	Gratiot.	Hillsdale,	Houghton,	Huron,	Ingbam.	Loses.	Losco. Lron.	Isabella.	Jackson.	Kalamazoo,	Kalkaska.	Kent.	Кеwеепаw.	Гареет.	Leelanaw.	Гепямее.	Livingston.	Luce.	Mackinac.	Масошр.	Manistee.	Manitou.	Marquette.	Mason.	Mecosta.	Menominee. Midland.
А П Сапеев.	181	168	259	343	202	408	1 525	141 23	180	396	392	42	1001	50 37	245	104	450	151	10	4	824	230	4	1 69	115 1	153 3	308 90
Specified Causes	130	163	250	273	177 8	392	1112	29 16	169	872	386	4	950	48 37	287	77	427	143	*	87	815	202	4	121	100	144 3	268 77
Causes not Specified	-	10	6	20	153	18	15	12 7	Ħ	22	9	-	75	69	00	20.	83	00	+	7	6	53		18	9	03	10 13
CLASSES.										-					_				-								
I.—Zymotic Diseases	27	37	61	#	46	66	52	46 4	15	106	76	00	193	12 9	99	18	69	29	-	00	67	9	-	E	88	33 1	102 26
II.—Constitutional Diseases	12	31	25	8	22	63	63	16	27	20	92	9	192	7 5	40	18	113	27	1	9	53	13	-	30	21	31	29 8
III.—Local Diseases	57	15	103	16	62	158	19	39 10	47	133	163	16	368	18 10	79	16	153	57	00	-	117	7	-	11	81	14	57 27
IV.—Developmental Diseases	27	65	41	99	40	18	28	23 1	32	9	69	00	157	9 4	37	21	79	23	1	-	23	20	-	16	21	18	68 12
V.—Violent Deaths.	9	=	=	22	2	17	12	5 1	6	13	13	60	39	6 8	15	4	12	7	1		12	19	60	4	00	61	17 8
Unclassified	-	i	-	99	1	1	+	1			1	1	1	1	1	1	-	1	- 1	63	1	-	-1	-	1	00	1
Orders.							-																-	-		У.	-
I1. Miasmatic Discases	26	55	9	62	46	88	53	46 3	52	105	76	00	191	12 9	99	18	69	29	F	00	67	48	-	171	27	33 10	102 25
2. Enthetic Diseases	1	1	1	i	1	+	1	-	j	1	-	1	-	- 1	-	1		1	+	1	1	- 1	- 1	- :	+	- 1	- 1
S. Dietic Diseases	H	- }	-	-	1	1	-1	-	1	*		-	1	-1	-	- 1	-	+	1	1	1	-	+	-	-	1	1
4. Parasitic Diseases	-	1	1	H	1	1	- 1	1	23	-	-	1	-	-	1		1	1	1	1	1	1	1	1	+	1	-
II.—1. Diathetic Diseases	67	-	00	9	-	88	19	00	NG.	22	19	-	4	-	11	64	34	12	1	H	15	6/1	-	00	-	6	60
2. Tubercular Diseases	10	24	26	55	12	32	4	138	22	88	46	10	148	7	36	16	79	15	-	10	88	7	-	62	11	22	25
III.—1. Diseases of Nervous System	31	15	35	29	15	8	18	10 3	16	88	88	10	109	4	22	4	20	F	-	00	22	댦	7	65	00	13	11 9
2. Diseases of Organs of Circulation	10	10	88	11	10	34	21	10	00	20	150	1	57	-	15	1	30	15	-3	7	21	10	-	16	4	-	9 1

3. Diseases of Kespiratory Organs	10	13	18	#	27	04	12	0	72	40	80	0	23	00	23	22	90	22	14	1	8	23	1	#	16	16	22
4. Diseases of Digestive Organs	00	10	13	125	12	67	10	7 1	7	21	19	80	10	*	65	14	0.1	53	6		3 24	77	1	119	1	7	0
5. Diseases of Urinary Organs	64	60	-	*	67	6	10	1 1	64	17	15	63	21	i	-	10	7	12	7	63	-	10	-	4	-	10	-
6. Diseases of Generative Organs	-	1	=	1	-	-	69	1	1	- 1	1	1	23	i	1	1	1	1	1	1	- 1	1	1	1	Ť	1	1
7. Diseases of Organs of Locomotion	i	1	i	1	-	1	1	1	1	1	1	1	1	1	1	-	1	1	-1	1	1	1	1	=	ij	1	-
8. Diseases of Integumentary System	į	+	Ħ	-	01	4	03	-	1	0/3	91	1	10)	-	1	1	9	-	1	1	60	- 1	4	1	63	H
IV1. Developmental Dis. of Children	п	23	12	49	53	88	15	16 1	15	19	, 53	7	99	-	63	15	15	- 61	-		9	39	1	22	12	10	22
2. Developmental Dis. of Women	4	-	63	4	9	64	62	00	7	7	9	1	15	17	-	4		9	63	1	-	4 6	1	00	H	-	9
3. Developmental Dis. of Old People	=	10	12	00	04	23	17	90	8	31	. 36	1	58	63	-	15	9	75	6		1 25	10	7	15	ю	7	4
4. Diseases of Nutrition	н	1	64	10	1	63	н	-	1	9	90	1	18	1	-	00	1	- 6	-	1	-	1	4	16	1	1	
V1. Accident or Negligence	60	00	6	6	9	-	ın	25	10	00	9	67	83	- 1	10	-	00	10	10		9	9	61	63	1-	10	-
2. Battle	1	-	-	+	1	1	+	1	1	1	1	1	- 1	i	- [- 1	- 1	1	- ;	1	_	1	Í	1	i	1	-
8. Homicide	1	1	1	1	1	1	- 1	1	-	- {	- !	1	1	1	1	1	-1	1	1	- 1	1	1	1	i	1	1	- 1
4. Snicide	03	1	1	1	1	-	64	1	1	0.3	1	1	9	1	24	102	-	63	F	- 1	-	4		02	i	1	-1
5. Execution	i	i	i	1	- 1	1	1	1	1	i	1	1	1	1	1	- 1	1	1	1	1	1	1	ij	i	i	1	1
6. Violent Deaths	-	00	63	13	-	6	10	D.5	4	00	7	1	10	24	63	6	-	10	1 :		+	7 7	1	83	-	7	10
CLASS I.—ZYMOTIC.	27	37	19	19	919	66	52	46 4	75	106	76	00	193	2	9	99	18	69	53	-	8 67	48		171	88	88	102 26
I.—Окрки 1. Miasmatic	26	37	99	62	9	86	55	46 3	52	105	76	00	191	22	6	1 99	18	69	59	-	8 67	48	1	171	22	93	102 25
1. Small-pox	1	1	1	1	1	03	- :	1	1	1	- {	-	- !	1	-	- 1	- !	1	-	1	1		1	1	1	1	-
2. Measles.	9	*	8	4	-	60	1	. 1	77	63	4	03	60	-)	63	11	7	13	-	1	_	63	4	35	-	10	17
3. Scarlatina	1	1	61	6	-	16	+	- 1	-	4	82	1	9	j	-	67	-	00	-1	1	_	_	1	13	1	63	62
4. Diphtheria	ĸ	67	*	-	7	10	63	-	600	41	93	1	14	4.7	1 2	02		00	1	- 1	10			24	4	4	15
5. Quinsy	-	1	1	1	-	63	-	1	62	1	- 1	1	-	i	4	1	- 1	1	F	- 1	1	1	- 1	-	1	1	- 1
6. Croup	-	60	10	9	00	-	1	4	7	62	97	-	6	63	1	1	- 1	93	-		-	00	NG.	17	4		0
7. Whooning-cough	7			1	-		,	40	-	6		-	16			-	-	-	f		-		6	8	NC.	-	10

TABLE 77.—Continued.—Causes of Death; Classified.

Causes of Death, 1888. (Typhoid Fever. 10. Puerperal Fever. 11. Carbuncle 12. Influenza 13. Cholera Infantum. 14. Diarrhea. 15. Cholera Morbus. 16. Cholera Morbus. 17. Ague 28. S 4 4 17 10 1 1 11 1	Counties, 1888,	si .	-
2 1 1 1 1 1 1 1 2 2 2 1 1 1 1 1 1 1 1 1	Tosce. Tabella. Takeon. Kalkaska. Kankaska. Kent. Kent.	Lepheer. Lenawee. Livingston. Livingston. Mackinac. Mackinac. Mackinac. Manistee. Manistee.	Mason. Mecosta.
2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	52 7 7 55	6 1 20 7 1 1 10 9 18	00
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E	1	8 6 2 1 . 2 11 10 . 26	2 2
1 2 2 2 2 3 4 2 3 2 3 2 3 4 3 3 4 3 3 3 3	11 . 6 14 10	7 8 18 9 2 7 11 25	93
2 1 1 2 2 3 4 4 2 2 11 2 2 3 4 4 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4	1 1 1 4. 1	6	1 1
2 2 3 2 2 4 2 2 4	1	4 2 8 9 1	1
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20. Leprosy	4 . 2	4 1 2 1 2	- 1
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L-Order 2. Enthetic	1		- 1
1. Syphilis	1		-
Stricture of Urethra			1

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S. Hydrophobia	I.—Order 8. Dietic	2. Rachitis (Scury) 3. Delirium Tremens (Alcoholism) 4. Intemperance 5. Opium Bating.	I.—Ordde 4. Parasitic. 1. Thrush. 2. Worms. 8. Disease of Scalp.	CLASS II.—Constitutional. II.—Order I. Biathetic	2. \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	II.—Order 2. Tubercular 1. Scrotula 2. Consumption of Bowels 8. Phthisis (Consumption of Lungs)

TABLE 77.—Continued.—Causes of Death, Classified.

													క్ర	ıntık	Counties, 1888	.											.		
Causes of Death, 1888.	Gd. Traverse.	Gratiot.	Hillsdale.	Honghton.	нотиН	.mghgmI	.sinoI	losco.	Lron.	Isabella.	Jackson.	Kalamazoo.	Ка]казка,	Kent,	Кемеепам.	Lapeer.	. увпавод	Гепатее,	Livingston.	Luce.	Маскіпас.	Масоть.	Manistee.	Maniton	Marquette.	Mason.	Mecostà.	transpare	Menominee.
4. Hydrocephalus		1 3		1	- 1		-		1	i	1	i	-	-	00	1	- 1	-1	1	- 1		1	- 1	- 1	- !		- 1	- 1	
5. Marasmus	1	1	-	1		-	- 1	1	- [-	1	- 1	1	- 1	+	1	1	-	1	-1			1	- 1	1	- 1	-	. 7	
CLASS III.—LOCAL DISEASES	57		51 10	108	91 6	62 158		79 3	39 10	47	133	163	16	368	18 10	62 (9 16	8 158	3 57	20	7	111		14	114		31	14	16
III.—ORLER 1. Nervous System	31		15	35	29 1	15 4	18	18	10 8	16	33	58	10	109	10	4 22	23	1 50		11 1	00	25	100	81	61	62	00	13	18
1. Cephilitis		63	67	*	đ,	10	80	,	67	ģrā	ŵ	*	-	27	- 1	-	-	-	-	1 1	67	13		6		6	- 1	01	
2. Apoplexy	-	93	-	10	-	-	99	00	1	-	62	9	1	*	1			_	9	-	- 1	20	1	-		_		-	
3. Paralysis.	14		10	17	9	621	21	00	1	61	14	22	- [27	1	-	6	1 30		5	- {	П	-	-		00	-	-	
4. Insanity	-	99	- 1	-	1		-	- 1	- 1	- 1	4	22	1	00	i	1	-	1	1	1	1	1	1	- ;	-	-	- 1	1	
5. Chorea		_	- 1	- !	- 1		- 1	- 1	- 1	-	1	-	1	-	1	- 1		1	1	- 1		- 1	- 1	-	1	1	- 1	1	
6. Epilepsy	-	10	-	-	- 1	- 16	63	-	4	93		9	- 1		- ;				- 1	;			1	- 1	- 1	1	- :	- 1	
7. Tetanus	1	_	į	-	1		-	- 1	-1	-	-	1	1		-	1	-	1	- 1	- 1	- 1	-	1	-1	-1	1	- 1	1	
8. Convulsions	-	63	- 1	-	7	-	10	-	50	23	93	7	9	22	1	-	10	_	90	1	-		7 1	=	_	13	-	01	
, (Brain Disease	1	90	67	63	*	10	9	10	00	43	22	00	1	10	62	1		-	10	4	1	4	-	4	_	60	-	10	
b. Dropsy of Brain	-	-	-	-	-	-	-	-	- 1	1	1	-	-	- 1	1	1		-	1	1	-	1	_	-	1	1	+	1	
10. Spinal Fever		4	00	1	1	1	-	1	1	60	-	1	-	9	1	1	1	-	1	1	1	63	63	-	1	-	-	41	
11. Spotted Fever	1	1	1	- 1	1	1	1	1	1	Ì	-	1	1	-	1	1	1	1	1		1	1	1	+	1	1	-	+	
12. Meningitis	4	-1	1	-	-	1	-	1	03	1	1	-	1	1	64	-4	63	1	1	4	1	-	1	- (1	-	1	1	
18. Meningitis, Cerebro-Spinal	1	1	1	1	-	1	1	1	14	1	1	-	1	67	1	1			67	3	-	1	- 1	- 1	1	1	1	1	
14. Meningitis, Spinal.	1	- 1	-	+	1	-	-	1	-	H	*	1	1	00	-1	1	1		2	- 1	- 1	1		4	1	-	1	15	
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17.	17. Spine, Inflammation of	11	11	11	1-1	11	1 1		1 1	1 !	11		11		1 1	1 1	1 1	11	1 1	1 1	1.1	1.1	11	1 1	11	11	11	1 :
I.—OR	IIIOrder 2. Organs of Circulation	10	10	83	11	10	35	21	10		8 20	31	-	10 57	1	-	15	69	30	12	-	22	10		16	*	-	0
1	1. Pericarditis	63	1	4	-	-	Т	H	-	1	-	63		-	10	-	-	1	65	-	-	-	-	1	- ;	00	1	- 1
oi	2. Aneurism	1	1	1	1	-	63	-	1	1	1	-	89	-	-	- 1	1	1	2	-	1	-	-	1	1	1	1	1
69	3. Heart Disease	00	10	24	11	100	31	13	10	1	8 18	8 27	1 1	12	-		14	1 2	27	13	-	19	10	1	16	н	7	6
4	4. Emboli	1	-	1	-	1	1	i	1	-	1	1			1	-	-	1	1	4	i		-	i	1	-	+	- 1
L-0R	IIIOrder 3. Respiratory Organs	10	13	18	34	22	40	21	15	5 13	3 40	38		5 123	00	64	22	00	32	41		30	83	- 1	7	16	16	22
1	1. Epistaxis.	1	1	-1	- 1	1	1		1	1	1	1	1	- 1	1	-	1	-	- 1	-	j		- {	1	-		i	1
69	2. Laryngitis.	-	- !	-	-		-	i	1	-	- 1	- 1			-	1	1	-1	-3	1			1	1	1	1	1	- 1
00	8. Bronchitis.	1	-	1	19	10	-	1	-	60	-		67	=	1 4	=	4	01	-	1		93	1	1	24	1	-	10
4	4. Plearisy	1	1	7	1	-	1	=	1	1		63		-	00	1	1	- 1	1	1	- [_	1	1	1	+	1	-
ıć.	Pneumonia	6	00	10	=	77	29	12	12	-	9 29	9 29	5	88	4 6	3	10	4 2	38	13	i	22	16	3	16	14	12	7
6.	6. Asthma	1	1	ď	0.3	-	-	1	1	-	-		83	7	1	-	63	-	1	1		-	23	- 1	-	-	- 1	-
7.	7. Lung Disease	-	4	10	-	67	6	NO.	i	-	7		90	13	1	-	-	-	93	1	i	*	4	1	+	-1	03	-
8	8. Catarrh	1	1	1	-	1	1	1	ì	1	-	1	1	-	00	1	1	1	63	-		1		+	- 1	+	Ť	1
I,-0R	III,-Order 4. Digestive Organs	60	10	13	12	15	83	10	2	-	7 21	19	6	51	4	63	- 11	99	83	6	20	22	14		19	1-	*	0
ij	1. Gastritis.	. 1	1	-	1	1	64	- 1	-	-		_	1	-	93	- 1	63	- !	1	- 1	į	1	-	1		+	-1	-
જાં	2. Enteritis	1	4	9	00	11	-	4	9	-	7		3 1	15	62	00	2	9	00	4	99	12	00	3	14	9	67	90
69	Peritonitis	1	63	1	1	1	-	1	1	- 1	32	93	1		63	1	- 1	-	60	1	4	1	-	1	- 1	1	-1	-
4	4. Ascitis	-	1	-	- 1		-	1	1				1	1	- 1	- 1	-	1	- 1	- 1	- 1		- 1	-		-	1	1
6	5. Ulceration of Intestines	1	1	-	- 1	1	- 1	1	1	1	-	-		_	1	1	1	,	-	1		1	-1	- 1	1	1	1	- 1
6.	6. Hernia	-	1	-			63	=	1	1	- 1	-	63		63	1	-	- 1	-	1		-	- 1	-1		1	Ti-	
7.	7. Obstruction of Bowels	-	1	1	1	1	1	1	1	4	-	1	1		_	1	1	-	- 1	1		1	- 1	1	-	+		- 1
8	8. Intussusception.															-				4						-		

TABLE 77.—Continued.—Causes of Death, Classified.

												_	Counties, 1888.	ntiee	8	8 8												
Causes of Death, 1888.	.өэлөлиг. Тиялегее.	Gratiot.	Hillsdale.	Houghton.	Huron.	Ingham.	Jonia.	losco.	Iron.	Isabella.	Jackson,	Kalamazoo.	Кајкавка,	Kent.	Кеwеепаw.	Lapeer.	Leelanaw.	Гепаwее.	Livingston.	Luce,	Mackinac.	Macomb.	Manistee.	Maniton.	Marquette.	мавоп.	Mecosta,	Menominee.
9. Stricture of Intestines	1	- 1	1			1		1	1		- 1		1	1	:	1		1	1	1	1	7	- 1	1				1
10. Fistula.	- !	- [- !	- 1	1	-	- 1	- 1	1	+	-1	-	1	i	- 7	- {	- 1	-	-	- 1	- 1		-	-	- (- 1	_ }	- 1
11. Stomach Diseases	0.3	63	1	1	1	9	03	1	- 4	4	02	63	H	=	- (63	1	4	44	63	1	64		00	1	_	-	4
12. Pancreas Diseases	i	-	1			-	1	-	-	1	1	+	1	1	1	1		-	1	1	-	-	1	- !		1	1	i
18. Hepatitis			1	1	- 1	1	1	-	1	1	1	1	1	i	1	1	1			1	1	1	1	- 1	1	i	1	
Biliary Calculus				1.1	1		11	11	1 1	1 1	1 03	11	1	6.0	1 1			*	1 1	1 1	1 1	10	1 3	1 1	6.0			
15. Liver Discase	200	H	*	63	1	94	67	1	1	H	H	00	-	10	1	02		02	1	- 1	1	10			1	-	.,	2 1
16. Spleen Disease	1	-	1	- 1	1	1	-	1	1	1	-	1	1	H	1	1	1	- 1	-	i	-	1	1		-	- 1	-	- 1
17. Bowel Diseases, etc.	1	1	1	1	1	62	-	- 1	1	-1	63	9	1	9	1	- 1	1	4	-	1	1	63	1	-1	1	- }	_ ;	- 1
18. Mouth Disease	1	-	1	1	1			1	1	-	4	1	+	i	1		1	1	-	i	1		-1		1			1
III.—Order 5. Urinary Organs	69	60	7	4	63 -	6	NO.	-	-	93	E 80	22	2.3	12	1 1	10		12	7	01 -		10			4 7	-	10 -	
2. Ischuria			-		-	-	-	1	1	- 1	-	1	1	1	1			- 1	- 1	- 4	1	1	1	- :	1			- 1
3. Bright's Disease of Kidneys	1	1	70	1	1	10	24	1	:	т	00	10	н	10	1	03	1	9	92	-	1	1		-	63	1	93	- [
4. Diabetes	1	1	1	- 1	1	43	-	1	1	-	00	10	1	00	- 1	1	1	0)	-	i	1	41	1	1	- 1			- 1
5. Calculus (gravel, etc.)6. Cystitis		1	1			-	-		1 1		+			64	1 1							-	1 1	1 1	1			
7. Kidney Disease	1	-	7	62		-	-	-	-		00	10	-	9		-		4	. 00			60			-	-	_	

(Ovarian Disease			-	1	1	1	1				1	+				- 1	1	1	1		1		1	1	1	
1. Ovarian Tumor	-	1	-	1	1	-	63	1	1	1	-	- 1	1	1	+	1	+	+	1		i	+	+	+	1	1
2. Disease of Uterus	1	-	i	1	1	1	1	1	-	1	1	-	003	1	1	1	1	1	1	1	1	1	1	1	1	-
8. Hydrocele	1	1	1	1	-	1	1	1	1	1	1	1	-	1	-	1	1	1	1	1	1	1	1	1	1	1
NIIIORDER 7. Organs of Locomotion	- 1		. 1	1	=	- 1	- 1	1	1	1	- 1	+	1	- 1	1	-	1	- 1	- 1	- 1	- 1	-;	-	- 1	1	1
1. Arthritis	1	-	1	1	- 1	- 1	- 1	1	1	1	1	1	1	-	1	- 1	+	1	1	1	1	1	1	1	1	1
2. Joint Diseases	-		1	7	=	1	1	1	1	1	1	-	-	i	1	1		1	1	- 1	1	1	-	+	1	1
IIIOrder 8. Integumentary System	i	н	1	H	φį	4	61	-	-	64	24		10	H	-	- 1	9	-	į	0.0		- 1	*	7	60	1
1. Phlegmon.	1	- ;	1	-	1	-	- 1	-	1	-	+	1	67	1	-	Y	+	1	1	-1	- 1	1	3	1	1	1
2, Ulcers		-	1	1	+	- 1	1	- 1	1		1	-		1	1	1	- 1	+	1	1	-		1	1	1	1
3. Skin Disease.	1	Î	1	1	H	p0	61	1	H	-	+	į.	63	H	1	1	69	+	1	64		1	+	1	63	H
CLASS IV, - DEVELOPMENTAL DISEASES	52	833	7	99	0#	35	35	23 1	55	99	69	8	157 9	4	37	12	79	:	7	63	50	-	16	21	18	63 12
IVORDER 1 Dev. Dis. of Children	11	23	12	48	53	88	12	16 1	15	19	62	-	66 7	63	12	15	10	=	9	30	33	- 3	22	12	10	80
1. Still-born	10	12	00	22	15	18	9	2 1	7	13	12	-	37 5	1	10	-	11	6	4	15	25	.1	27	00	00	33 2
, (Infantile	10	00	10	21	6	10	8	10	9	9	=	64	28 1	40	10	00	9	-	23	6	14	- 1	10	9	-	15 6
Premature Birth	1	61	63	1	1	- 1	1.6	1	-	1	-	=	1 1	1	1	1	-	-	1	4	1	1	12	1	+	+
3. Cyanosis	1	1	1	1	1	-	1	1	3	1	- 1	1	1	1	1	1	1	1	1	-	i	1	+	1	1	1
4. Spina Bifida	1	. 1	1	1	1	- !	- 1	1	1	1	1	1	1	i	1	- 1	1	1	1	- [-	i	1	1	1	1
5. Other Malformations	1	1	-	T.	-	- 1	1	1	1	- 1	1	1	1	- 1	1	-	-	1	- 1	1	-i	1	1	1	1	1
6. Teething	-	i	1	00	- 1	4	-	1	93	1	-	+	4	1	1	1	4	-	1	1	1		00	-	1	4
7. Injury at Birth	i	i	1	1	1	1	1	Į.	1	1	+	+	+	Ť	1	+	-	1	1	- 1	1		+	1	1	-
IV,-Order 2. Dev. Dis. of Women	*	1	20	4	9	53	63	.00	L	*	9	7	15	-	4	- 1	9	93	- !	*	8	-1	00	-	-	8
(Dismenorrhea	İ	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	+	1	+	- 1
7 Torn of Life					=		_																	H	+	

TABLE 77.—Continued.—Causes of Death, Classified.

												Ö	Counties, 1888,	ies,	1888												
Causes of Death, 1888.	Gd. Traverse.	Gratiot.	Hillsdale.	Honghton.	Huron.	Ingham.	.sinoI	.losco.	Iron. Isabella.	Jackson.	Kalamazoo:	Каікаєка.	Kent.	Кеwеепаw.	Luke.	Lapeer.	Leelanaw.	Гепаwее.	Livingston.	Luce. Mackinac.		Macomb.	Manistee.	Manitou. Marquette.	-	Mason.	Mecosta.
Childbirth	7	-	03	4	9	60	63	00	1	-	4	9	-	14	+	+	1	10	93	1	1	4	9	1	02	-	-
2. Abortion Uterine Hemorrhage.	11	11		11			11	Ti	1 1	11	1 1	11	- 1	1 1	1 1	++	1 1	+ +	11	1 1	1 1	11	1 1	11	1 1	++	1. 1
IVORDER 3. Dev. Dis. of Old People	1	10	21	00	6	83	17	00	-	69	31 2	26	10	53	1	15	9	75	0	7	-	52	10	.=	15	10	-
1. Old Age	n	10	22	00	6	23	17	00	-	60	31	56	MCS.	2 89	1	15	9	Z	6	1	-	52	NO.	-	12	10	7
IV.—Order 4. Diseases of Nutrition	_	- 1	93	NO.	1	63	-	=	-	-	9	00	-	18	-	os.	- 1	1	-	- 1	- 1	4	i	- 5	16	-	- 1
1. Atrophy and Debility	1		63	10	1	93	-	-	-	-	9	00	-	18	-	00	1	1	=	-	-1	4	1	-	16	1	+
CLASS V.—VIOLENT DEATHS	9	1	11	22	7	17	12	10	н	9 1	1 1	13	99	89 2	6	15	*	12	-	1	-	19	19	64	7	00	23
VOrden 1. Accident or Negligence	92	00	6	6	9	1-	10	20	-	10	00	9	63	23	ю	=	00	NG.	10	5	9	*	6	23	69	-	KO.
1. Fractures and Contusions	1	1	K	6.7	1	1	-	i		63	4	00	-	7	60	+	1	63	63	- 1	-	24	=	-	+	- 1	-
2. Wounds	H	1	1	- 1	- [1		i	1	1	1	1	1	20	- 1	- 1	1	+	1	1	-	1	-	- 1	- 1	-	-
3. Burns and Scalds	1	1	1	-	1	20	1	i	1	1	-	60	-	1	=	1	н	-	н	1	-	1 23		H	- 1		=
4. Poison.		1	1	1		1	-	1	-	-	,	-	-	1	1		+	1	H	1	- 1	+	-	- !	- 1		6.3
5. Drowning	1	m	63	63	00	Τ.	-	60	1	-	60	1		9	-	-	-	-	1	1	+	-	00	- 1	- 1	00	-
6. Suffocation	1	1	1	1	1	63	-	i		-	63	-	-	-	1	1	1	1	-	1	+	+	+	-	1	- :	- 1
7. Otherwise	-	-	1	*	-	H	63	1	-	1	1	1		10	+	÷	+	-	Ť	+	+	-	63	-	67	03	1
V.—Order 2. In Battle	1		1			1		i	- !	- 1	- !	- 1	- 1	- 1	- 1	- 1	- 1	- 1	i	- 1	- 1	- 1	- 1	- 1	- 1		1
V.—Order 3. Homicide	-	-			-		-	- 1		1		-	_	- 1	-	-	1	-	i	- 1	-	-			_		- 1
1 Murder			ľ			Ī							_	_			-				-			_	_		

V,-Order 4. Suicide	64	1	1	1	1	=	63	1	1	91	i	1	9	63	0	1	63	-	1	1	4	90	65	1	1	+
1. Wounds	1	1	1	1	1	1	+	1	1	1	i	1	1	63	54	1	1	-	- 1	-0	-	1	1	1	-	1
2. Poison	1	1	1	1	1	1	1	1	- [-	1	1	+	+	1	1	1	-	+	1	1	1	-	1	1	+
3. Drowning	-	1	1	1	+	+	+	1	1	1	1		1	1	1	1	1	i	1	1	-	1	1	1	1	+
4. Hanging	1	- 1	i	1	1	1	-	1	1	1	1	1	1	1	-	1	1	-	+	÷	1	1	1	1	1	1
5. Otherwise and not Specified	-	1	İ	1	1	H	63	1	1	67	T	-	40	1	43	1	H	1	1	-10	63	90	93	1	1	+
V.—Order 5. Execution	i	1	i	1	1	1	1	1	-	- 1	-1	1		-	- }	*	1	1	- 1	-1	3	- 1	1	1	. 1	1
1. Hanging	1	1	1	i	1	1	+	+	1	1	1	1	1	+		1	1	-	+	-	1	1	-	1	-	1
V.—Order 6. Violent Deaths not Included above.		60	61	13	+	o.	ю	69	4	00	-	H	10	67	6	-	10	-	-	-	-	-	68	-	7	101
UNCLASSIFIED	1	1	1	63	1	1	1	1	- }	1	1	1	-	- 1	-	1	=	1	1	01	1	-	H	1	00	1
1. Head Disease	-	1	1	F	1	1	-1	1	- 1	-	1	1	1	-	1	1	1	1	1	1	1	+	1	1	1	+
2. Hemorrhage.	1	1	1	i	1	1	1	1	1	1	1	1	-	1	1	1	1	1	1	1	4	+	1	1	1	1
8. Inflammation	-	1	1	-	1	1	7	1	1	1	1	1	1	1	1	1	H	- 1	1	+	1	1	-	1	22	-
4. Otherwise	1	1	1	1	1	÷	1	1	1	1	1	1	1	1	1	1	-	1	1	1	1	1	1	1	1	1
Causes not Specified	1	10	6	20	22	16	13	12	11	24	9	-	ż	21	00	27	83	00	Ħ	7	6	52	18	9	6	40 13
			-		-	-	-	-						-		-			-	-	-					-

TABLE 77.—Continued.—Causes of Death, Classified.

	_											ర	Counties, 1888	8 6	æ											
Causes of Death, 1888.	Missaukee,	Monroe,	Montealm,	Montmorency.	Muskegon,	Newaygo.	Oakland,	Осеава,	окешам.	Ontonagon,	Osceola,	Oscoda,	Ottorio,	Ottawa. Presque Isle.	Roscommon,	.wantgag	Sanllac.	Schoolcraft,	.998sawald8	St, Clabr.	'sr yoseby.	Tuscola,	Van Buren,	wanbideaw.	. маупе.	Wexford,
All Causes	62	330	232	7	461	112	385	95	35	23	130	+	19 8	341	39	18 916	8 268	25	1 182	482	888	317	343	Ħ	5,301	88
Specified Causes.	88	310	227	-	448	102	368	16	98	23	H	00	19 8	821	83	18 865	5 248	88	171	452	382	305	338	391	5,015	98
Causes not Specified	4	10	70	1	18	10	1	H	91	4	0	-	1	50	- 11	1	511	52	8 11	08	9	12	7	8	286	69
CLASSES.																										
I.—Zymotic Diseases	8	8	35	-	127	20	75	30	12	9	17		93	69	п	5 197	7 54	10	0 53	3 122	9	78	28	68	1,410	0 10
II.—Constitutional Diseases	4	99	53	1	22	17	89	30	00	63	23	1	4	24	-	3 156		67	2 18	37	67	82	99	76	88	4 14
III.—Local Diseases	10	16	87	6.5	158	89	162	31	7	00	2	1	10	901	00	6 254	-	92	6 659	133	130	114	135	145	1,521	1 32
IV.—Developmental Diseases	10	59	43	63	80	16	69	30	*	7	20	1	4	83	11	3 198		52	62 29	20	57	4	29	62	1,077	7 21
V.—Violent Deaths	00	19	6	-	21	10	15	00	=	1	0	64	00	30	-	10	75	6	00	2 36	16	22	17	22	151	1 7
Unclassified	1	63	1	1	1			i	1	1	1	-	1	1	-		9	00	-	63	6.3	-	-	63	63	63
Orders.										-	-	-	-	_		_	_									
I1. Miasmatic Diseases	9	80	35	1	127	13	55	30	15	9	17	:	00	88	=	5 197	7 54		9 53	121	9	72	28	67	1,393	3 10
2. Enthetic Diseases	1	1	1	1	1	1	1	1	1	1	1	1	1	- 1	1	1	1	1	1	1	-	1	1	1	п	-
3. Dietic Diseases	1	-	1		1	-	H	i	1	i	-	1	1	-	1	4	1			1	- 1			1		
4. Parasitic Diseases	1	1		1		1		1	1	1	1	1	1	7	1	1	1	1	1			-	ı, į	1	1	1
II.—1. Diathetic Diseases	1	18	15	1	12	6	13	6	1	-	9	.1.	-	2	1	1 42	16	-	_	65	23	=	21	81	207	7 6
2. Tubercular Diseases	4	88	88	-	43	00	22	=	ora	-	17	-	00	62	-	2 114	33	64	14	97	4	88	\$	45	627	2
III1. Diseases of Nervous System	90	55	22	1	\$	9	99	-	9	-	17	-	-	32	1	1 83	22	9 1	3 19	49	38	88	55	4	647	11 /
2. Diseases of Organs of Circulation	1	15	12	-	=	9	32	10	-	63	00	-		50	-	- 38	2 10		15	24	16	18	30	88	180	

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TABLE 77.—Continued.—Causes of Death, Classified.

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Causes of Death, 1888.	Мізевикее,	Monroe,	Montesim,	Montmorency.	Muskegon,	Newaygo.	Oceana,	Ogemaw.	,подяпотпО	Osceola,	Oscoda,	Otsego.	.ewatto	Presque Isle,	Roscommon,	Saginaw,	Sanilac	Schooleraft.	Shlawassee.	St. Clair.	St. Joseph.	Tuscola.	Van Buren.	, wanbitenaw,	. Маупе,	Wexford,
Typhoid Fever	62	10	7		11	00	10	10	61	4	1	1	9	-	- 1	27	Ħ	Ø1	180	8	00	00	6	10		72
8. Typhus Fever.	Ī	- !	1	i	+	+	-	1	1	1	1	- 1	- 1	1	1	1	1	1	1	1	1	1	- [1		-
Typho-malarfal Fever		1	-	1	1	1	63	1	1	-	1	1	1	1	1	-	1	1	1	1	63	1	1	-		-
9. Erysipelas	1	60	61	1	*	-	10	1	1		1	-	63	1	1	9	10	1	9	10	14	9	99	6	10	6
10. Puerperal Fever		1	-	1	-	-	1	-	1	-	1		89	1		10		1		93	62	-	63	1	_	0
11. Carbuncle		1	r	1	i	- 1	1	- 1	- 1	1	1		i	1	- 1	1	-	-	1	-	- 1		- 1	1	1	-
12. Influenza		1	1	1	1	1	+	1	1	1	1		1	1	1	1	1	1	- }	1	- 1		1		1	
13. Dysentery	-	4	1	1	4	1	2	61	1	-	1	1	200	=	-	01	1	1	-	4	1	10	yC.	1		7
14. Diarrhea	1	1	1	1	6	1	1	1	- 1	-	i	- (=	1	1	15	K	1	1	ka	00	90	- 1	23	187	7
15. Cholera Infantum.	1	7	7	1	25	63	6	63	1		1	-	10	- 1	63	53	00	90	7	18	80	11	17	7		178
Cholera Morbus.		-	H	1	+	T	+	1	1	-	- 1	-	-	1		63	-			64	1	60	-	1		10
(Cholera	_	1 '	1	i	1 0		-	1	1	1	1		1	1	1	1 9	1 0	1	1 0	1 8	1 .	1	1	1		1 0
I/. Ague		,	•	1	N3 L	1 0	1 0	-	-	1	1	1	**		1	7	4 0	-		20 0	77	,	19			8 5
18. INSTITUTE OF PREFERENCE OF THE PROPERTY OF	1	,	1	-	2 0	9	9 6	1	1	1	i	_				* ,	9 ,	1	* 0	- 0	:		1	0 0		3 8
19. Indeumatism	1	1	•	1	9	1	9	-	-		1		9			0	1		9	0	4		•			
Orden 2. Enthetic																1									-	
1. Syphilis.			j	-			-		- 1	i		1		- 1					- !				i			-
2. Stricture of Urethra.	842	1		1	1	-	-	+	1	1	1					-										
Conformation	Ρ,	1			i	-	1	-	1	1	1	1	1	1	1	1	1	1	1	1	-	1	-	1		1

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	1 1	1 1			1	1					1 1	1 1	1	1		1 1	1 1	1 1	1	1			1	
	1	1	-	- 1	-	1	1	1	+	-	+	+	1	-	1	1	1	1	- 1	-	1	1	1	1
-	1	1	1	1	1	1	1	1	1	1	1	1	+	+	i	1	1	1	-	+	1	-	1	
	1	+	-	1		i	Ť	1	1	÷	1	+	+	+	1		1	1	- 1	1	1	1	1	1
(Alcoholism)	1	1	1	1	1	+	1	+	1	1	+	1	+	1	1	-	1	-	1	1	1	1	1	24
	1	1	1	-	-	i	T	1	÷	+	- 1	1	1	-	1	1		-	1	1	1	1	1	60
	1	+		1	1	Ť	İ	1	1	1	1	1	1	+	1	+	-	1	1	-	1	1	1	1
	1	- 1	- !	-	-	-	1	1	1	4	- 1	1	- 1	1	- 1	4	- 1	-	1	-	4	-		
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-	4	1	1	4	•	i	1		1	+	1	+	- 1	1	1	- 1	- ;	- 1	1	-	-	-		
-	÷	-	-	1	1	Ť	i	1	+	\pm	+	- !	- 1	+	1	+	- 1	-	+	+		1		1
	*	299	58	25	17	88	8	00	61	55	-	4	24	H	99	156 4	67	63	18 7	75 6	67 50	99 0	76	884
	1	18 1	15	12	6	13	0	1	-	9	1	-	12	i	4	42	16	1	63	29	22 11	12	31	207
						i	1	1	1	1	1	1 1	1 1	1 1			1							
1	1	=	20	00	10	6	99	1	-	00	- 1	- 1	10	- 1	94	22	00	i	-	12 1	13	7 7	9	127
	1	7	7	*	*	4	9	1	1	00	1	-	-	1	1 2	20	-	7	1	14	00	4 12	22	74
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	4	88	88	43	00	18	11	00	H	17	-	00	53	H	23	114 8	83	03	4.	46 4	45 39	9 45	45	627
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owels	-	-	1		1	02	1	1	+	1	1	- 1	+	1	1	-	1	1	1.	1	-		1	85
tion of Langs)	6	90	200		t	2	-	*	•	-	•	-		,	9	400	00		40		44	41	*	502

TABLE 77.—Continued.—Causes of Death, Classified.

Causes of Death, 1888. 4. Hydrocophalus 5. Martsmute. 1. Cophillitis. 1. Cophillitis. 5. Apoplay 7. Tetanus 8. Convalsions 9. Spring Fever. 10. Spring Fever. 11. Sported Fever. 11. Meningtits Spinal 13. Meningtits Spinal 14. Meningtits Spinal 15. Meningtits Spinal 16. Spinal 17. Spinal 18. Meningtits Spinal 19.													ర	Counties, 1888.	1 98	88											
stem 8 88 27 45 6 16 2 81 7 8 42 5 106 8 6 254 76 6 65 188 180 114 185 2 2 3 15 4 1 1 1 4 1 18 18 18 27 6 6 5 188 180 114 185 2 2 2 1 1		Missankee.	Monroe.	Montealm,	Montmorency.	Muskegon,	Newaygo.	Oakland.			7	-				-	-				- 1	-					Wаупе,
stem. 10 94 87 3 153 30 162 31 7 8 42 5 106 3 6 254 76 6 65 133 130 114 135 31 2 2 2 1 5 4 2 4 1 1 1 4 1 13 5 1 6 5 1 5 1 6 1 1 1 1 1 1 1 1 1 1 1 1	4. Hydrocephalus		- }	1	1		1	- 1	1		1	1	1	1	1	- !	1			- 1	1		- ;			1	
stem	5. Marasmus	i	1	i.	1		1	1	1	1	1	1	1	1	1	+	1	-	1	1	1	1	1	1	1	-	
8 83 27 45 6 16 40 36 35 41 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	CLASS 3. LOCAL DISEASES	10		87	00	153	88	162	31	10	00	42	7		98	02										-	
2 2 3 10 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	III.—ORDER 1. Nervous System	00		27	1	4	9	92	-	9	H	17	- 1	-	35	-	1 8							-		=	647
10 2 2 1 2 2 3 4 2 4 2 4 2 4 2 4 2 3 2 3 3 3 3 3 3 3	1. Cephilitis	Fİ	41	95	1	15	1	#	-	-	1	4	1	1	22	- 1		- 3			20		67	-	+	10	
2	2. Apoplexy	4	64	6.7	1	-	£	93	1	-	1	1	1	1	1	-	-	63	1	1	1	61	*	63	4	67	
2	3. Paralysis	1	10	7	1	4	1	23	43	1	i	00	1	-1	6	- 1	- 1	6	-	-				-	- 30	6	
4 4 2 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4. Insanity		1	- 1	1	- 1	1	63	-	1		-	-	1	- 1	1	- ;	- 1	-	1	1		- 1	1	1	-	
2	5. Chorea	4	- 1	1	1	1	1	1	1	1	+	+	- 1	1	-	-	_	- 1	_ [1	-	-	_	1	-	-,	
11	6. Epilepsy	1	61	61	1	1	1	7	- 1	=		1	1	1	-	-	- !	-	-	1	-	-	1		1	-	
8 5 6 7 7 8 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7. Tetanus	1	1	1	1	1	1	1	1	1	1	1	1	1	63	1	1	1	1	1	1	- 1	-	1	- 1		
4 1 2 2 3 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1	8. Convulsions		-	00	9	10	63	90	H	1	:	90	-		10	- 1	-						- 7.5	4	-	40	
4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	, (Brain Discase	60	=	01	1	00	-	9	63	=	1	1	:	T	02	1	-	-	10	_						0	
2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3	" Dropsy of Brain	1	-	1	i	63	- 1	. 63	+	1	1	1	- 1	+	-	1	- 1	-		1	1	-	-1	-1	1	-	
1 1 2 2 2 1 2 3 8 8 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	10. Spinal Fever	4	4	80	1	4	-	1	-	-	1	63	1	1	1	1	-	1	-	1	1	-		60	-	1	
1 1 1 2 2 2 3 8 8 3	11. Spotted Fever	1	- 1		+	1	. 1	1	1	- 1	1	1	- 1	+	1	- 1	1	- 1	- 1	1	- 1	1	-	1	1	1	
1 1 2 2 2 3 8	12. Meningitis.	- Trans	1	1	1		i	i	1	1	-	23	- 1	- 1	1	-1	-	63	1	-1	7	_	- 1	1	1		
2 2 2 2 2 2 2	13. Meningitis, Cerebro-Spinal	-	-			i	i	i	-	+	1	1	1	1	1	1		-	1	-1	1	1	- 1	-	1		
	14. Meningitis, Spinal	1	1		1	1	=	1	1	64	1	63	- 1	:	64	1	-		92	1			63	- 1	1	-	

17.	17. Spine, Inflammation of	-				i	- 1	1	-	-	_!	-		-			1	1	-	+	-1	-	-	- 1	-	-
18.	18. Frightened	-	1	i	- 1	1	Ť	-	+	4	-	1	1			1		1	+	+	- !	- 1				+
0	IIIORDER 2. Organs of Circulation	1	15	123	-	14	9	32	10	-	63	00		20	-	1	25	10	1	15	24 1	16 1	18 20	33		180
1	1. Pericarditis	1	7	21	1	1	-	-	-	-	_	02	- 1	63	1	1	-	-	1	60	-1	63	8	99		15
oi	Aneurism	-		93	-	1	+	1	-	1	-	1	1	-	1	1	-	i	-	+	1	_	-	_		4
99	Heart Disease	1	11	90	-	13	10	15	10	-	63	2	i	18	-	-1	88	6	-	123	24	14 1	16 17	28		191
4	4. Emboli	1	1	1	1	1	T	1	1	+	+	1	1					1	+	+	+	1	1			
0	III.—Order 8. Respiratory Organs	67	23	20	1	88	6	45	10	-	20	8	50	62	-	93	10	8		13	36	87	36 53	30		381
H	1. Epistaxis	1	1	1	1	1	Ť	1	+	+	1		1	1	1	1		İ	+	+	+	1	1	1	1	- 1
oi	2. Laryngitis.	1	1	1	-	Ť	1	1	1	1	-	-	1	1	1	1	Ì	1	1	+	1	1	1	1		23
o	Bronchitis	1	1	-	į	+	1	00	+	- 1	03	1	i	67	1	1	14	+	+	1	67	63	2	60		68
4	4. Pleurisy	1	1	- 1		1	н	1	+	-	-	1	_	1	-	1	Ì	Ť	1	-	60	-	_	J		18
ĸ;	5. Pneumonia	27	17	19	1	#	*	55	-	+	1	6	64	18	-	00	83	13	1	9	18	31 2	27 42	85		232
6.	Asthma	1	1	-		-	-	1	+	+	1	1	1	1	1	1	63	-	1	+	1	+	63	23		21
7.	7. Lung Disease	1	4	-	7	7	4	ю	-	-	+	-	1		1	1	17	*	1	9	4	-	10			
8	8. Catarrh	1	-	1		63	+	1	+	+	1	-		1	-	1	-	+	1	+	1	1	1	1		63
0	III.—Order 4. Digestive Organs	- !	14	15		23	=	15	10	1	63	1		22	-	64	24	Ħ	-1	0	13 2	1 1	14 15	11	100	213
4	1. Gastritis	-	1	-	-	1	7		+	1	+	1	1	1	1	-	1	63	1	-	1	-	23	_		17
ri.	2. Enteritis	-	00	7	-	16	-	10	9		-	59	1	14	-	-	15	93	1	-	00	60	9	20		H
85	Peritonitis	1	1	1	-	1	*	83	+	+	_	-	1	-	1	1		1	1	-	1	63		_		6
4	4. Ascites.	1	1	-}	1	i	1	1	+	1	1	1	1	1	1	1	1	1	1	1		-	-	63	1	1
'n	Ulceration of Intestines	1	1	1	1	1	-	1	+	1	1	-	-	1	- 1	1	Ī	1	1	1	14	63	-	1		=
6.	6. Hernia	1	23	1		j	1	1	-	-	1	1	1	1	1	-	-	1	-	-	=	1	_	-		-
7.	7. Obstruction of Bowels.	1	1	1	1	Ť	i	+	1	4	1			1	1	1	Ť	1	+	+		-	1	1		=
œ	Intraspagntion				Id			1				-				-		-	-	-	-					-

TABLE 77.—Continued.—Causes of Death, Classified.

Causes of Death, 1888. 9. Stricture of Intestines. 10. Fistula. 11. Stomach Diseases.	Monroe		'GA'		-	-	-	-	1	-						-	1	1		-	1				
stines.		Montealm	Montmoren	Muskegon,	Newaygo,	Oakland,	Осеара	Ogemaw.	Ontonagon,	Osceola,	Oscoda,	,ogesto	.ewanio	Presque Isle,	-	Saginaw.	Schoolcraft	Schooleraft,	Shiawassee,	St, Clair,	St' losepp'	Tuscola,	Van Buren,	Washtenaw.	Wayne.
10. Fistula. 11. Stomach Diseases.		-	1	- {	1	1	1	1	1	-	- 1	1	- 1	1	1	1	1	3	-	1	1	1	1	- }	1
11. Stomach Diseases.	+	- [-		1	1	1	1	- 1	- 1	-	- 1	+	- 1	- 1	- 1	-1	- 1	1	1	1	- !	1	1	1
	1	4	61	*	93	-	63	-1	+	1	4	1	4	-	.5	*	49	1	-	63	10	63	93	1	53
12. Pancreas Diseases		i	1	1	1	1	1	1	1	1	1	1	- 1	- 1	- 1	- !	- 1	- 1	1	1	1	1	-	1	1
13. Hepatitis	-			1		1	1	1		+	1	- :	1	- 1	- 1	-}	- 1	1	-	-	1	1	1	1	
(Biliary Calculus	. 1	-	1		i	1	1	- 1	- :	1	- 1	1	- 1	- 1	1	- 1	1	1	1	1	1			1	1
14. Saundice	1	-	1	-	1	1	-	- 1	1	- 1	- 1	- 1	-	1	+	. 7	-	1	1	1	1	-	1	1	
15. Liver Disease	1	20	1	-	99	1	1	1	;	-	1	+	- 1	-	- 1	00	04	- 1	-	63	03	00	00	9	20
16. Spleen Disease	1	1	- 1	1	1	i	1	+	+	-1	- 1	- 1	1	1	1	1	1	- 1	-	1	-	1	1	- [
17. Bowel Diseases, etc	7	1 2	1	1	1	=	+	1	- 1	+	1	1	1	+	- 1	-	-	1	63	1	00	1	-	-	
18. Mouth Disease	+	1	1	1	1	1	+	+	+	+	+	+	+	+	+	1	1	1	+	1	1	1	1		60
III.—Order 5. Urinary Organs	1	9 11	-	00	9	63	4	-	1	00	-	-	4	- !	- 1	6	00		00	12	=	00	11	2	78
1. Nephritis	1	-	-		H	1	1	+	1	+	+	-	+	1	-	-	1	+	+	+	1	63	1	1	14
2. Ischuria	1	1	1	1	1	1	1	1	1	3	1	-1		1	1	1	1	1	1	1	1	1	1	-	1
3. Bright's Disease of Kidneys	1	8	-	10	н	13	00	15	н	-	+		60	1	-	*	60	1	9	00	-	64	6	10	23
4. Diabetes	1		1	1	63	00	-	1	- 1	-1	1	- 1	1	- 1	-	-	4	1	1	Ø3	1	-	1	-	7
5. Calculus (Gravel, etc.)	-				1	1	1	1	-	-	1	-	- 1	1	-	-	-	1	1	- 1	1	i	1	1	10
6. Cystitie	1	-	1	1	1	+	1	1	1	1	1	1	+	-	1	1	1	1	+	1	-	1	1	1	
7. Kidney Disease	-	*	-	00	03	10	+	1	1	63	1	-	1	1	-,-	+		1	61	10	00	4	63	9	19
III - Opper 6 Generative Oreans	_	3				-	_	H	-	-	_ 2		- 6				_	-	-		0		_		

1	
-	
11	1 1 1
4 5	1 1
1	1 1
2 87 16 69	16
2 65 13 20	13
1 38 8 10	88
1 23 4 6	7 7
1	-
8	1
23 12 23	-

TABLE 77.—Continued.—Causes of Death, Classified.

•											4	Con	aties	Counties, 1888.											
Causes of Death, 1888.	Missaukee.	Monroe,	Montealm,	Montmorency,	Muskegon,	Oakland.	Осевпа,	. wamego	.nozenotnO	Овсеода.	Oscoda,	Otsego.	.gwaito	Presque Isle.	Вовсопиноп,	Saginaw.	Santiac,	Schooleraft,	Shlawaesee.	St, Clair.	St. Joseph,	Tuscola,	Van Buren,	WandtheaW.	
(Child-birth	·	621	63	1	63	H	63	-	03			1	03	64			10		69	8	10	10	- 1	10	
2. Abortion	1	İ	1	1	+	1	1	- 1	1		1	1	1	1	-	1	1	1		1	1	-	1	-	
Uterine Hemorrhage	1	i	-	1	1	1	1	1	1	1	1	1	1	1		-1	-		-1			1		1	
IV.—ORDER 3. Dev. Dis of Old People	+	88	*		16	-	4	9	-			0.1	22	61		43	13	-	13	31	91	11	22	37	
1. Old Age	Т	83	4	i	16	4	4	9	-	-	1	63	22	67	1	43	13	1	13	25	31	11	24	37	
IV.—Order 4. Diseases of Nutrition	1	10	-	1	*	- 1	9	63	- 1	-	69		٥	- 1		25	KO			99	60	-	11	16	
1. Atrophy and Debility	1	NO.	+	- ;	4	1	9	63	1		61		6	1		整.	10	ď	1	93	00	-	=	16	
CLASS V.—VIOLENT DEATHS	00	19	6	H	21	101	15	89	-		6	83	02	1	1	72	6	92	10	98	16	22	17	21	
VOrden 1. Accident or Negligence	6.3	10	*	1	15	10	-	-		-	10	1	16	-	1	25	4	93	4	24	00	16	12	12	
1. Fractures and Contusions	1	2	1	-	63	- 1	1		1	-	99	1	8	1	1	7	-	63	60	93	64	-	63	9	
2. Wounds	-	-	1	1	-	н	-	1	-1			1	1	1		1	1		1	1	-	1	1	н	
3. Burns and Scalds	1	6/1	-	d	00	:	-	-	- 1		i	1	23	1		63	1	1	-	10	T	1	02	1	
4. Poison	a design	-	1	1	-	1	-	1	1	-	1	1	1	-	1	1	1	1	1	63	-	1	- [1	
5. Drowning	H	1	H	1	10	-	-	1	1	1	1	1	20	j	-	11	1	1	- 1	11	00	10	10	93	
6. Suffocation	-	-	1	1	+	-	-	-	-	1	- 1		-	. !		1	1		1	99	1	00	1	63	
Otherwise.	1	-	1	1	90	00	=	H	1	1	1	-	-	-	1	*	1		1	1	64	10	64		
V.—Order 2. In Battle	ı.		i	+	+	- 1	1	1	-	1	1		1	1	1	-1	1							1	
VOrder 3. Homicide.	1	1	i	1	+	1	63	1		1	1	1	1	-	1	1	1	1	-	63	T	1	Ī	i	
1. Murder							•									1				0	Ĭ		Ī		

VOrder 4. Suicide	1	-	+	1	•	-		1	-	9	1	-	1	+	1	=	50	;	-	00	29	1	-	10	7
1. Wounds	-	t	1	1	1	1	1	1	1	-	1	1	1	1	1	69	1	1	1	+	1	1	-	1	1
2. Poison	1	1	-	+		-	-	į	-	-	1	1	Ť	1	i	+	1	1	1	1	-	1	4		=
8, Drowning	1	1	-	1	1	1	1		i		Ħ	1	i	1	i	†	+	1	i	1	+	1	1	-	+
4. Hanging	1	+	-	+	1		H		-	-	i	1	i	1	1	67	1	1	1	1	=	1	-	63	1
5. Otherwise and not Specified	1	-	1	1	1		67	1	Ì	1	1	H	Ì	Ť	1	-	01	1	-	00	+	1		63	13
V.—Order 5. Execution				1 1					ii					-11			+		+			1 1		-11	+
V.—ORDER 6. Violent Deaths not included above.	-	00	10	-		-	80	93	- 1	-	61	H	+			18	99	- 1		-	9	10	4	4	20
UNCLASSIFIED.	1	63	+	1	-	1		-	1	1	1	i	1	-	1	9	00	-	-	63	67	-	-	63	23
1. Head Disease	11			\mathbb{H}	11	11		11	H		Ħ	11	ii	Ħ	1 1	H 63	11	1 1	1 1	-	1 -	1 1	1 1	1 .	1 2
S. Inflammation	1	63	-	4	1	1		-	İ			1	i	i	1	90	00	-	-	-	-	F	-	63	6
4. Otherwise	1	-	1	-	1	-	1	-	1	i	İ	Ì	1	-	1	1	1	+	1	-	1	1	-	-	-
Canses not Specified	7	9	100	-	18 10	14	1	-67		6	1		20	=		21	22	00	11	30	9	12	7	30	386

TABLE 18.—Exhibiting, by Sex, by Months, by Specified Causes, and by Ages in Periods of Years, the Number of Deaths Returned for the Year 1883, also by Sex and Specified Causes, the Number of Deaths Returned for each of the Years, 1883–1888, inclusive. (Still-births included.)

					-	Months, 1888.	hs, 1	888								X	Years,	1						-	Ages in Periods of Years,—1888	E.	Peri	spc	of Y	sare	1,	888			
Sex.	January.	February.	March.	April,	May.	.eant.	July.	'isuZny	September,	October,	November,	December,	Unknown,	,888I	.7887	1888	T882*	1881	18881	Under 5,		2 to 10.	15 to 20.	30 40 32	25 to 30,	30 to 32,	35 to 40.	,64 of 04 lb	45 to 50,	50 to 55.	'99 01 09	65 to 70.	10, 10, 15,	,08 of GT	80 and over.
otals	1416	1585	1865	1909	1909 1858 1627	1627	1789	2169	197	8 184	1978 1848 1642	2 2012	99	21764	19482	2 18187	-	90691 99081 91998	6 1690	6 8480	30 881	1 565	5 832	696	882	169	780 6	9 629	659 666	6 698	8 841	952	947	888	1042 305
fales	752	830	998	991	1011	982	941	1156	1072	2 1004	888	8 1099	988	11722	10563	8 9725	5 9025	5 9589	9 9101	1 4699	99 454	4 267	7 402	455	426	388	381 3	353 3	385 356	6 376	6 486	550	543	506	563
emales	199	752	866	916	846	692	846	1013	206	5 844	4 748	3 911	1 26	10024	1 8877	7 8402	2 7569	9 8385	-	7748 3763	38 427	7 298	8 430	514	514 459	358	399 3	326 2	274 310	0 322	2 355	405	101	388	479
Inknown	99	00	-	23	1	1	0.3	1	7	1		-	23	18	42		60	52 8	82 5	57 1	00	- 1	1	-1	- }	1	1	1	1	-	1	1	- ;	- (1

TABLE 78.—Continued.—Specified Causes of Death.

					Mo	nth	Months, 1888.	88							-	Years.									AB	98	Ages in Periods of Years,—1888.	eric	de	of Y	ear	1	1888				
Se x.	Januaty.	February.	March.	April,	May.	June,	July.	'asuguy	September,	October,	November,	December,	Unknown,	,7881		.388I	1885.	7881	18881	Causes of Death.	Under 5.	5 to 10.	.ct of 01	15 to 20.	.62 of 02	.08 of 62	.d8 of 08	82 40 40.	40 to 45.	.05 ot 64	.66 of 06	.00 of 66	.60 to 65.	.07 of 50	,67 of 07	.08 of 67	. Tevo bas 08
Females		1	H	1	+	1	-	-	1	- 1	H	-i	- 1	KO	=======================================	-	27	9	12	Abortion		1			53		H	64	1	1		- ;	-	- ;	- 1		
Males	i	1	÷	-	-	-	-	-	1	- 4	-1	1	- 1	- 1	1	=	63	1	1	Abscess of Back	1	1	1	- 1	1	3	1	1	- }	- 1	1	- ;	1	1	1	1	- 1
Females	Ì	1	-	+	1	1	- :	1	1	1	-	1	1	16	04	1	H	1	i		- 1	- 1	1	- 1	1	1	1	1	1	- 1	- 1	:	1	1	1	1	1
Males	.1	+	1	1	+	+	+	+	- 1	1	-	1	-	63	1	*	93	4	02	Abscess of Bowels.		1	1	-1	1	- 1	-	01	- 1	1	:	- 1	- 1	- 1	- 1	- 1	- 1
Females	- 1	1	1	+	1	1	1	- 1	1	- 1	- 1	1	-		99	63	1	-	62		1	-1	- 1	- 1	1	- 1	-1	- 1	1	1		1	1	- 1	1		. 1
Total	:	-	4	00	00	-1	03	1	00	1	1	1	_	91	11	4	H	00	Ħ	Abscess of Brain	*	63	23	1	04	1	7	1	91	1		1	- 1	- 1	1	- 1	1
Males	1	-	6.3	н	02	1	=		64	1	-	1	-	01	-	1	н	92	-		2.0	64	6.0	-	1	-	. !	-	-	1	- 1	-1	- 1		1	- 1	1
Females	1	1	63	64	1	7	H	1	-	1		1	-	9	4	60	+	1	1		9/3	- }	1	3	61	1	-	1	H			- 1	- 1	- 1	- 1	- 1	1
Males	- 1	-	-1	1	-	- 1	-		- 1	× 1	- 1	1	-	-	1	:	=	1	1	Abscess of Groin	- 1		- 1	- 1	_;	-	1	- 1	1	1	1	- 1	- 1	-1	- 1	- 1	1
Females	1	1	- 1	1	1		-1	- 1	- 1	-	1	1	1	- !	1	- 1	- 1	-	-		į	- 1	- 1	1	1	-	1	1	- 1	- 1	- 1	1	- 1	1		- 1	- 1
Males	1	1	1	1	1		- 1	-1	- 1	1	-	1	- 1	-	4	÷	-	10	-	Abscess on Head	1	- 7	- 1	- 1	- 1	- 1	- 1	:	- 1	- 1	- 1	1	1	1	1	- :	1
Females	- 1	i	+	1	- 1	- 1	- 1	- 1	- 1	- !	- 1	1	- 1		-	- 1	- 1	-	- 1	3	3	1	- 1	1	1	1	-				- 1	- 1	- :			1	- :
Total	1	1	-	- 1	1	-	- :	- 1	1	- 1		1 d	-	61	-	- 1	1	9	1	Abscess on Hip	- 1	-	1	- 1	- ;	1	. 1	1	- 1		- 1	1		1	-1	- 1	- 1
Males	1	1	1	1	.1	-	-		- 1	- 1	- 1	-1		-	-	3	1	10	- 1			-	1	1	1	1	1	1	- 1	- 1	-	- 1	- 1	1	1	1	- 1
Females	Ť	- 1	-	+	1	- 1	- 2	- 1	- 1	- 1	- 1	1	-	-	1	1	1	H	1		- 1	-	1	1	1	-	1	1	1	- 1	- 1	- 1	- 1	1	1	1	- 1
Males	÷	1	=	- 1			1	=	- ;	- 1	1	1		69	1	-	63	1	1	Abscess of Kidneys.	;		1		- 1	- 1	H	- 1	- 1		-1	1	1	-	1	- 1	- 1
Females	1	1	+			- 1	7	- 1	- 1	1	1	1	1	-!	1	1	- 1	1	-	:	- {	-	- 1	- 1	-	1	1	1	1	1	1	- 1	1	T		. :	- 1
Malee	1	1	1	1	-	-1	- 1	-		1	1	1	1	- 1	- 1	- 1	-	1	-	Abscess on Leg	- 1	-1	1		- 1	1	1	1	i	- 1	- :	- ;	- :		1	- 1	1
Males	1	1	1	-	1	1	7.	1	- 1	- 1	+	- 1	- !	1	- !	1	1	00	1	Abscess of Neck	- 1	4	- 1	1	1	1	13	4		4	1	-		1	+		- 1
Females	++	+	1	1	1	1	1	1	+	1	+	+	_	1	-	1	+	1	1		1	1	-	1		1	İ	1	1	1	1	1	İ	1	1		1
Males	-			1	-		-	- 62		1	-				-					Abacess, Pelvic		ιĹ						S									

TABLE 78.—Continued.—Specified Causes of Death.

					Moi	Months, 1888.	3, 18	88						5 4	Years.									Ag	ee in	1 Pe	Ages in Periods of Years,—1888.	ls o	f Ye	BILB	Ī	88				
Sex.	January.	February.	March,	April,	.vaM	June,	, taugust,	September,	October,	November,	December.	Unknown,	18881	'2881	1886.	1885.	.488I	1883.	Causes of Death.	Under 5.	5 to 10.	10 to 15,	15 to 20.	20 to 25.	.08 of 62	80 to 85.	.04 of 68	40 to 45.	45 to 50.	20 to 22.	.09 of 55	,60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 and over.
Females	1		i	- 1	- 1	- 1	- :	- ;			- 1	- 1	н	00	69	=	1	- 1	Abscess, Pelvic	- 1	-			1	-	-		-	1	-1	-	1	- 1	- 1	- 1	1
Total	1	-	-	1	-	- 1	1	- 1	7	1	1	- 1	10	10	00	6	00	4	Abscess in Side	- }	1	- (1	-	- 1	- 1	i	- 1	-	-	- ;	- :	-	-	-	-
Males		H	1	-	-	-	-	-		-1	н	- 1	00	00	10	9	1	63	,	- 1	- 1	_ [- 1	- 1	1	1		- 7	-	1	1	- 1	-	-	- :	- 1
Females	-1	1	-	1	1	- 1	- 1	-	-	1	1	:	63	63	00	00	63	94		- }	1	- 1		-			1	1	1	-	1	-	- ;	- 1		-
Males	-	i	i	-	1	- 1	1	1	- 1	-	्	+	1	F	-	1	-	-	Abscess of Spine	9	-1		1	1	1			-	- 1	1	1	1	-	-	- }	- 1
Females	-	i	1	1	+	- 1	- !	- 1	1	1	- 1	- 1	-	+	-	-1	-	1	:	1	1	- 1			1		- 1	-	1	+	- 1	1	- 7		- 1	1
	1	1	1	+	-	:	-	-	1	62	1		10	*	-	-	800	4	Abscess of Stomach	. 1	1	- 1	1	1	1	1	- 1	-	1	1	63	+	÷	-	-	- 1
Males	1	1	- 1	- 1	+	-	-	-	1	-	;	-1	00	63	- 1	-	65	00		- 1	- 1			1	1		1	=	1	1	+	- 1	4	-	-	- ;
Females	-	i	1	-	+	1	1	į	- 1	-	1	1	03	67	-	+	:	1	:	- 1	1	- ;	1	1	1	1	-	i	1	H	=	+	- !	- 1	- 1	- ;
Total	8	-	1	00	9	64	00	-	7	1	NO.	-1	7	58	45	82	34	25	Abscess	9	- }	00	00	00	9	00	03	6.0	03	01	10	64	-	- 1	- 1	-
Males	-	-	-	61	00	-	10	0.3	-	1	99	- 1	19	14	55	12	12	22		93	1	1	H	64	-	00	1	-	63	1	00	н	=	-	- 1	;
Females	10	H	-	-	00	-	00	2	00	1	63	-	22	15	20	17	18	6		00	1	64	93	1	10	-1	00	+	-	01	6.3	+	1	:	1	-
Males	i	i	1	-	+	1	- 1		1	1	1	- ;	-	1	+	+	1	1	Amputation of Arm		- 1	- 1	-1		1	Ť	1	=	- 1	1	- 1	1	- 1	-1	-1	- 1
Total	ca	1	-	=	d	1		23	63	1	- 1	- (00	1	4	80	1	1	Amputation of Leg.	- 1	-	1	-	1	-	- 1	00	-	=	-	1	:	=	:	- 1	- 1
Males	H	1	H	-	+	- 1	-	00	64	;	1	1	-	1	*	60	1	1		- [1	- 1	-	- !	-	1	03	-	- :	- 1	:	1	-	- 1	- 1	- ;
Females	-	1	-	1	- 1	1	-1	1	1	1	- [- (-	1	+	-1	-	-1	3	1	-	1	1	1	1	1	=	- 1	- 1	1	-:		1	1	- ;	- !
Males	1	1	1	1	-	+	1	1	- 1	- [- 1	+	-1	t-	1	1	1	93	Amputation	-l	- {	1	- 1	1	-	1	- ;	÷	1	1	-	-	- 1	- ;	- 1	. :
Females	1	1	1	1	1	1	1	1	- 1	į	- }	+	1	1	1	1	1	-	,	- 1	-	1	- 1	1	i	1	1	1	1	-	1	- 1	-	1	- 1	- 1
Males	i	Ť	+	+	-	-	-	- 1	-	1	1	-:	00	4	1	63	4	1	Anemia	1	1	- 1	-	1	1	1	+	1	+	-	- 1	-	-1	1	- 1	- 1
Females		1	+	1	1	1	1	1	1	1	· Y	1	7	*	00	-	*	80		1	1	i.	- 1	1	- ;	i	÷	÷	1	1	-	+	1	- 1	- 1	;
Males	-					-							60	.00		0	-	*	Anomalom									-	-	-		-	,	-	_	_

remailer	1																													
Total	-	1	i	-	1	7	-	1		- (-	63	23	6	Angina Pectoria		1	4	1	i	i	1	-	1	63	-	-	1	1
Males	1	- 1	1	1	- :	-	1	1	1	1	1		1	-	20			1	- 1	1	1	1	1	1	1	1	1	-	1	
Females	1	1	1	1	1	1	1	-		1	63	-	-		j		1	1	4		1	1	1	- 1	Į.	03	1	į	1	1
Total	8	1 12	17	14 1	1 8	80	151	12	9 18		144 18	185 158	8 116	6 130	88	Apoplexy	-	63	+	63	00	6.3	00	7 22	12	16	17	30 15	18	10
Males 24	10	6	11	10	8	*	10	00	8 11	- 1	. 18	92	98 68	8 81	68		1	63	-	-	1	63	90	6 1	13	6	18	20 11	12	00
Females	00	00	00	*	63	4	10	02	1 7	-	17	6	4	8 48	97	4	1	-	4	=	67	1	- 1	1	7	7	**	0	9	63
Total	10	10	9	-	8	6	10	64	10	1	65	0	6 62	2 61	12	Asthma	-	-	1	-	62	4	99	62	4	4	-	8	9	9
Males	10	63	K	10	4	60	64	63	83	- 1	40	88	23	2 39	20		1	1	1	-	1 1	63	00	- ;	*	63	60	1 6	93	00
Females	1	67	-	6.3	10	9	00	1	4	1	25	36	27	7 22	22		-	1	171	1	1	6/1	1	20	j	-	4	63	9	93
Total	-		1	+	- 1	1	64	1	1	- 7	10	0	4	-	7	Birth, Injury at	-	10	1	1	- 1	1	1	- 1	1	1	+	- 1	1	- 3
Males	-1	-	1	+	- ;		H	- 1	-	1	63	10	03	-	_		:	64	1	1	-	- 1	1	- !	- 1	-	-	- 1	1	1
Females	-		i	-	1	- [-	1	- 1	-	00	10	63	00	- 1		1	00	1	- !	-	- 1	1	- ;	- {	-1	- 1	- 1	1	i
Total	9	7	10	4	9 9	10	-	4	D3	-	69	52	38	6 53	47	Birth, Premature	_	69	1	- 1	- 1	- ;	1	- 1	- 1		+	- 1	1	- 1
Males	03	9	10	00	60	93	93	63	1 6	-1	17	38 2	20 38	8 22	33		1	17	- 1	1	1	1	1	- !		1	+	- 1	1	-
Females	00	-	10	-	60	63	4	64	2 1	-	28	19 1	18 18	88	13		1	88	- 1	1	- 1	1	1	-	1	1	-	i	1	- 1
Unknown.	1	- [i	- 1	- 1	- (-	1	1	- 1	1	- 1	-	00			1	- 1	1	1	i	1			-1	1	=	_		- 1
Males	+	-	1	-	1	1	-	64		1	8	99	92	00	63	Bladder, Disease of		-	1	1	-	- 5		į	1	64	-	-	-	2
Females	- 1	1	İ	1	1	: 1	1	- 1	- 1	i	-1	- 1	=	-	63	*	:	- 1	1	1	- 1	1	1	- !	1	1	1	i	1	
Total	=	-	-	- 1	į	1	-	- 1	-		70	24	28 15	5 12	17	Bladder, Inflam. of	o of	-	1	1	-			1	- 1	1	1	63	1	- 1
Males	=	- [-	1	1	1	-	1	-	-1	4	22	23 13	3 12	14		:	-	1	1	- 1	- 1	- 1	- !		1	-	63	1	- 1
Females	1	-	i	- ;	- 1	di		:	1		+	61	-	63	60	3	:	- 1	1	1	-1	1	1	_ !	1	1	-1	1	1	- 3
Males	1	1	Ì	1	- 1	1	-	- 1		1	1	63			1	Bladder, Rupture of	e of	-	1	1	-		1	- 1	. 1	1	+	i	1	- 1
Total	80	1 2	01	6/3	90	*	*	+	23	- 1	31 2	24 2	21 19	9 34	83	Bowels, Consump.	70	1	-		6 1	63	-	-	-	н	61	1	1	1
Males	63	1 1	-	1	-	00	63	-	62		16	-	10	9 18	21			80		1]	+	-	-	-	1	- ;	64	3	3
Females	1	4	1	63	63	н	e4	93	ï	:	15 1		1 1	16	11	:		93	1	1	1 2	-	1	-	1	н	67	-	1	1
Total	0	2	4	04	60	12	13	63	63	7	20	90	16 25	5 45	97	Bowels, Disease	ð	85	-	1	1 1	1	02	63	1	63	00			-
Males			-	,	,	0		,			-	0		1						Y										

TABLE 78.—Continued.—Specified Causes of Death.

					Mor	the	onths, 1888	88							Years.	. 2							-	Age	Ages in Periods of Years, -1888.	Per	pot.	s of	Yea	rB,	-188	œ.			
Sex.	January.	February.	March,	April.	May.	June.	August,	September,	October,	November,	December,	прикромп,	.6881	.7881	.3881	1882	1884.	1883,	Causes of Death.	Under 5.	.01 of 6	.ct ot ot	12 to 20.	20 to 25.	80 40 80	80 to 35.	35 to 40.	40 to 45.	50 to 55,	.00 of 66	.60 to 65.	.07 of 58	.df of 07	.08 of 47	. Tovo bas 08
Females	H	H	- 1	00	-	67	61	9	9	61	1	- 3	53	42	23	11	53	18	Bowels, Disease of.	138	- 1		- 1	H	-	-	-		53	-	63	63	į		- 3
Total	=	27	255	25	39	37 35	5 40	0 43	38	37	30	00	390	339	327	324	350	394	Bowels, Inflam. of	143	18	24	20	21	17.1	15 2	75	8 10	0 19	9 12	=======================================	16	123	=	10
Males	2	13	=	24	23	20 18	18 21	1 28	8 19	32	10	93	219	188	168	169	185	152		28	7	6	138	=	=	8 1	=	4	9 13	9	00	8	7	5	90
Females	+	14	71	138	16 1	17 17	7 19	9 15	5 17	15	10	1	171	151	159	155	165	142		58	#	15	-	10	9	9 1	118	4	1 7		00	7	10	9	63
Total	- 1	-	Ħ	7	1	-	- 1	.00		1	=	1	00	9	03	00	00	4	Bowels, Obstruct'n of	00	1	1	F	1		+	+	- 1	-	- 1	03	1	H	- 1	-1
Males	1	-	-	=	1	-	- 1	-	1	1	-	1	9	00	00	10	0	-		63	1		-	1	1	1	- 1	-	-	- 1	20	-	-	- 1	1
Females		1	1	1	1	- 1	- 1	63				1	63	00	- 1	00	03	80	,, ,,	-	- ;		1	1	1	- 1	- 1	- 1	- 1	- 1	1	1	7	1	1
Total	+	1	1	1	1	-		-	1	-	=	1	90	603	43	64	92	43	Bowels, Rupture of	-	П	1	- 1	1	-	16	-	- 1	-	1	1	1	1	1	- 1
Males		1	1	- 1	1	-	-	_	- 1		-	1	63	63	-	1	64	-		1	н	1	- 1	-	- 1	-	-	- 1	- 1	Ti.	1	1		1	- 1
Females	-	1	1	1	1	-	- 1	-	- (-	- [- 1	H	1	-	F	-1	-		-	- 1		1	-1	1	- 1		- !			- ;	- {	1	- 1	- ;
Total	i	1	-	63	-	7	1	1	67	1	1	H	œ	7	*	60	10	*	Bowels, Ulceration of	1	1	1	1	1	- 1	- ;		7	63	1	93	1	1	1	1
Males	i	1	-	-	1	-	-	1	1	-	1	- 1	10	9	-01	H	4	63		- 1	-	1	1	1	- 1	- 1	7	-	-	-	01	-	1		:
Females	-	1	1	-	-	- 1	1		-	1	-1	-	93	-	63	63	-	63		1	- 1	Ì	1	+	+	1	1	-	-	1	4	1	-E	1	1
Males	1	i	1	. 1	1	1	1	1	-	1	1	i	i	1	H	1	1	64	Brain, Compressi'n of	1	1	1	1	1	1	1	1	-	1	i	1	1	1	1	- ;
Females	1	1	1	+	1	1	1	i	1	1	1	i	1	1	1	1	1	т	:	1	1	- 1	1	1	1	- 1	1	1	1		- }	1	1	-	1
Total	1	+	1	-	- 1	-	-	-	-	-	93	1	00	00	4	12	11	10	Brain, Cone'ssion of	- 1	İ	15	+	-	03	-	_	-	-	j	-	1	1	F	1
Males	1	1	1	-	- 1	-	-	-	1	1	90	1	10	00	00	6	11	00	1 1	- [1	1	- 1	1	63	-	_	1	1	1	Į	1	1	-	:
Females	-	1	1	-	3	1	,	-	-	1	1	- ;	00	1	н	02	1	67		- /	- 1	1	H	3	1	1	- 1	1	1	1	1	1	1	- 1	1
Total	17	6	6	4		9 15	19	18	15	7	19	1	152	175	971	175	158	184	Brain, Disease of	96	6	10	9	*	8	1 2	2	1	10	1	*	7	10	62	1
Males	00	-	10	93	00	7	1 12	6	00	4	=	1	88	*	82	103	92	77		28	. 4	do	4	00	-	7	0	1	01	1	*	00	0/3	-	Ť
Females	6	41	4	-	60	80	7	6	-	20	00	-	19	16	64	739	99	16		34	10	01	07	-	-	_	0	_	0	*		•	9	,	

Total	26 18		88	48	31 26	31	47	40	31	82	=	405	618 9	9 332	2 296	018 9	0 298		Brain, Inflam. of	225	37	20	12	17	8	10 1	11 14	8	9	00	4	20	10	23	70.0	
Males	=	00	19	28	30 15	11	24	22	16	83	21	218	8 156	6 172	2 157	7 177	7 163		:	118	22	7	10	00	10	6	9	10	4	4	00	10	00	03	90	
Females	12	10	18	20 11	11 11	1 20	83	18	15	2	80	187	7 163	3 160	0 139	9 133	3 130	0	:	107	15	13	=	6	00	-	5 10	8	61	4	F	1	63	+	-	
Total	0/1	+	F	03	63	-	01	-	6/1	1	03	18	8 19		17 20	0 11		4 Brain,	in, Paralysis of	43	1	1	1	1	=	1	-	1	4	***	+	1	64	-	67	
Males	1	-	H	01	-	7	-	1	0.1		-	=	63	6	8	0	10	00	3	63	1	1	1	3	1	- 1	+	-	-0.3	est	i	1	0.1	=	60	
Females	63	1	- 1	7	1	- 1	-	- 1	4	H	-	-	8	0	9 16	0		:	:	1	- 1	F	1	-	-	1	-	1	61	62	-1	H	1		+	
Total	02	93	1	00	-	4	NO.	93	67	63	00	90	65	88	30 36	8 40	0 22	Brain,	in. Softening of	4	2/3	1	1	1	-	23	69	20	0.3	03	60	9	10	4	-	
Malee	00	1	=	1	80	6.3	67	93	1	63	63	22	28		26 27	7 28	8 16	**	:	67	**	1	1	1	H	H	1	-	6.2	-	1	9	63	.00	-	
Females	1	-	1	60	-	63	00	-	1	1	-	15	1.7	63	-	1 0	12 6		:	64	7	1	1	1	-	-	-	7	1	23	63	- 1	63	07	1	
Females	1	H	1	- 1	- 1	- 1		1	1	i	- 1	-	63	-	63	- 1	- 1	Brea	Breast Discase	1	1	1	1	1	- 1	- 6	- 1	- 1	-	- ;	1	=	-1	+	-	
Total	4	-	93	6)	-	1	-	- (1	i	1	12	03	-	23	-		6 Bror	Bronchitis, Capillary	00	1	1	1	1	- 1	1	-	- 1	1	į	1	-	=	64	1	
Males	03	1	1	-	1	1	-	- }	1	i	1	-		69	1	1		10	:	00	1	i	1	+	- 1	- 1	-	1	- 1	- 1		j	=	+	- 1	
Females	63	-	93	-	-	1	1	- 1	- 1	1	1	-	on	63	67	1	-	_	:	10	1		1	-	-1	1	1		- 1	1	-	+	-	63		
Total	-	н	=	- 1	- 1	- 1	-	i	:	1	- 1	-	-	00	23	1	- 1	Brot	Bronchitis, Chronic	7	- [1	1	- 1	1	- 1	- ;	- 1		1	-1	=	63	- 1	1	
Males	-	1	-	1	_ [1	1	Í	1	1	1	- 1	04	60	-	99	- 1	_	:	-	- ;	1	1	3	- 5	1	1	- 1	4	1	1	- 1	-	+	1	
Fomales	- 1	H	1	1	- 1		-	1	-	1	1	1	62	_	22	1	1	_	:	1	1	1	1	1	-1	-	- 1	_ !		-	-	-	-	- 1	- 1	
Total	13	16	16 2	28 33	3 17	10	9	139	12	16	50	185	5 118	8	5 109	88	82		Bronchitis	142	00	Ø1	H	H	00	-	63	9	99	-	20	10	9	67	1 2	
Males	10	-	6	15 17	9 1	9	64	-	00	-	6	88	8 69	92 6	63	25	=			72	H	-	1	1	-	_	_	00	00	02	92	-	93	=	1	
Females	00	6	-	8 16	3 11	*	4	9	4	6	=	- 87	49	68 6	9 48	44	39			70	03	H	-	-	67	- !	_	03	1	*	0.3	-	02	-	- 1	
Total	92	=	23	200	7	23	- 1	0.3)C	9	8	55	22	2 38	33	84 48	8	Burns	18	18	-	1	-	N	02	-	-	1	- 1	03	-	+	+	- 1	- 1	
Males	00	1	-	7	-	1	1	Ĭ	4	П	00	- 16	3 15	22	1 14	23	8 19	:		6	63	1	1	63	63	-	:	- 1	- 1	1	1	1	-1	- 1	1	
Females	1	H	-	90	-	63	- ;	61	-	1G	00	19	9 12	2 15	22	22	26	:		a	10	1	=	1	-	-	1	- 1	1	63	H	+	+		- 3	
Total.	20	22	96	01	47	44	4	88	49	22	37	1 480	458	391	1 403	361	888	Cancer	ж.	=	П	64	23	02	5 12	20	0 46	42	35	44	88	65	45 3	30	16 4	
Males.	7	120	10 1	15 16	3 19	18	18	=	17	55	10	193	3 185	171	183	3 173	3 180	:		7	1.	-	1	00	-	93	13	10	18	19	*	32	233	14	-	
Females	13	61	17 2	25 28	828	83	26	119	32	92	27 1	1 287	268	3 220	0 220	188	223	:		*	-	1	67	6	4 10	91 0	33	32	55	83	75	30	22	16	4	
Total	63	1	-	02	_	90	70	-	-	7	0.3	23	288	22	5 15	50			Canker, (Noma)	20	1	1	1	1	- 1	i	1	-	1	1	1	1	- 1	- ;	1	
Males	=	1	1	61	-	-	-	-	1	H	-	3	80	~		8	13	:	:	6	-	1	1	1	1	- 1	- 1	1	- 1	1	1	1	+	- ;		
Females	H	1	1	T	- 3	63	*	1	-	-	1	12	20	16	60	17	00	-	3	11			1	-	-	3		1	- 1	1		- 7		- 1	- 3	

TABLE 78.—Continued.—Specified Causes of Death.

	80 and over.		1	1	1	6 6 18	4 18	63	63	64	1	-	1	1	-	1	00	1	2	1	1	
	.08 of d7	- 1	- ;	-:	-		-	-	_	_	1	- 1	- 1	_1	1	- 1	1	25	63	24	1	
	70 to 75.	1	1	- 1	- 1	1	7 10	00	_	-	_		1	- 3	1	- 7	- 1	02	64	63	:	
8	.07 of 68		1	- 1	- 1	9 10		00	-		- 1	- 1	1	_1	- 1	- 1	- 1	02	_	64	- ;	
-18	,60 to 65.		- 1	1	1		6	-	64	63	1	- 1	-	- 1	- 1	1	- 1	1	i		1	
É	.09 of 63		1	- 1		22	19	00	-		_	-	1	:	1	- 1	- 1	93	1	23	1	
Yea	50 to 55.		- 1	- 1	1	16	7	~1	4	200	-	_ ;	-	- 1	1	- 1	- 1	80	- 1	80	-	Е
Jo	45 to 50.	1		1	- 1	83	22	- 1	-	-	1			- 1	3	- 1	03	1	- 1	- 1		
Ages in Periods of Years,—1888.	40 to 45.		- 1		;	19	18	-	-	-	1	- 1	1	i	1	- ;	-63	1	1		-	-
Peri	85 to 40.	- 1	- ;	i	- 3	18	18	1	-	- 1	-	i	1	- 1	1	1	33	- 1	- 3	1	i	
in	.68 of to 85.	1	-	1	- 1	88	83	- 1	63	63	1				- 1	1	933	-	- {	-	- 1	g
368	.08 od 32		1	1	\sim	돯	83	-	П	-	- }	- 1	- 4	- 1			61	- 1	1	-		
A	.ds of 0s	1	1	1	- 1	4	4	-	-	-	1	1			1		57	1	1	1	_;	
	15 to 20.	-	1	i	1	25	28	10	-	1	1	1	1	1	1	1	17	00	1	00	1	
	10 to 15.	- 1	1	1	1	22	23	93	1	1	1	1	- 1	- 1	- 1	1	- 1	-	- 1	-	1	
	5 to 10.	- [1	1	- 1	19	77	73	1	1	1	1	- 1	1	1	1	- (1	1	i	1	
	Under 5.	- 1	1	1	1	38	17	a	*	-	80	1	- 1	1	60	- 1	1	6	ro.	4	00	
	Causes of Death.	Capsule Renal	*	Carbuncle		Casualty	*	- 10	Catarrh			Cellulitis.	Chest Disease		Chicken-pox		Child-birth.	Chills, Congestive			Choking	7
	1888.	-	-	43	83	908	274	63	8	4	10	1	1	-	-	-	221	45	21	24	63	1
	'#88T		-	83	1	306	261	44	11	9	70	63		1	1	1	222	4	2	20	62	Ī
ø	1882.	-	1	00	63	297	255	42	16		10	-1		1	00	H	217	88	17	21	63	-
Years.	'988T	T	1	200	-	350	305	45	18	13	00	1	+	=	-	1	213	21	10	=	H	1
	'288T	1	1	67	-	385	331	25	50	=	6	1	1	-	1	1	223	4	22	17	4	
	'888T	+	1	H	1	364	324	40	22	11	00		04	i	61		248	81	=	20	10	
	Unknown,	-	1	3	-1	=	-	1	:	:	3	:	- 1	1	- 1	- 1	1	1	1	:	1	-
	December,	- 1	1	1	1	2	55	9	-	-	-	-	- ;	1	-	1	8	63	1	63	-	ī
	November,			1		88	88	i	03	63	Н	1	1	1	1	1	12	*	-	00	1	Ī
	October,		1	1	1	30	8	4	60	63	1	1	-	T	1	1	17	4	+	00	1	Ī
	September.		3	1		7	34	7	73	*	-	1	1		1	1	13	67	1	-	1	
onths, 1888.	, hargust,		1	-	-	#	55	4	-	- 1	-		1	-	1	1	83	64	1	esi	-	
, sq	July,		1	1	1	83	18	10	23	-	1	- 1	- :			:	13	63	-	1	1	1
ont	,sant	-	1	- 1		22	22	1	64	63	1	1			1	1	13	H	-	1		
M	May.	1	1	-	1	35	35	93	-	-	4		1		1		22	00	1	93	-	3
	April.		1	-	-	22	8	63	93	63	-	1	1		1	1	15	-	-	1	-	Ī
	March.	1	1	-	- 1	30	53	-	NG.	99	63	-			1	1	32	63	-	-	1	1
	February.		1	-	1	12	=	-	1	- ;	- 1	-	-	-	- 1	1	27	10	67	02	-	Ī
	January.	-	- 1	1	i	88	24	64	1	1	- 1	1		1	-	;	20	02	22	-	-	
	Sex.	Males	Females	Males	Females	Totals	Males	Females	Totals	Males	Females	Females	Males	Females	Males	Females	Females	Totals	Males	Females	Total	

Females 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 2	F	Choking	00	T	i	1	1	1	-	÷	:	-	1	1	+	+	- 2	1
Total 14 10 17 17 23 34 125 271 165 55 15 18 3 767 626 653 36	360 781	465	Cholera Infantum	756	10	H	- 1	- 1	1	-1	- 1	- 1	1	1	1	-		- 1	10
Males 7 6 7 8 12 17 62 154 95 27 4 9 2 410 364 348 16	199 435	270	:	405	20	1	- 1	-;	1	- :	- 1	1	- }	- 1	1	+		- 1	93
Females 7 4 10 9 11 17 63 117 70 28 11 9 1 857 262 305 16	161 344	195	;	351	99	+	1	1	1	-1	-	1	- 1	1	1	+	- 1	- 1	- 00
Unknown	63	1	:	1	1	i	1	+	-	- 1	-1	- 1	1	1	1	- 1	- 6	- ;	- 1
Total 2 2 2 4 1 10 17 6 6 1 1 52 57 42 4	42 50	27	Cholera Morbus	22	H	4	1	-	1	1	63	5	62	8	-	60	00		64
Males 1 2 1 6 6 5 5 26 30 20 2	24 28	17	:	9	- 1	-	1	-	1	-	2	00	63	63	1	93	=		- 1
Females 1 2 4 11 1 1 1 1 1 26 27 22 1	18 24	6	"	11	-	63	-	1	1	-	1	67	1	-	+	-	63	-	64
Unknown		1	:	1	1	i	-		- 1	-		- 1	1		1	- 1	- 1		- 1
Total 1 1 2 2 2	9	9	Chorea	1.	Ï	ï	-	1	1	1	i	- 1	- 1	1	-	-1	+		- 1
Males 1 1 1	1 2	00	:	- 1	1	1	1	1	:	- 1	1	- 1	-!	- 1	H	- 1	- 1	- 1	1
Females 1 1 2	52	00	*	1	1	1	+	- 1	1	-	1	1	- 1	1	+	1	1	-1	-;
Males	1.	4	Cirrhosis	Ý	1	1	+	-	+	1	- 1	1	- ;	1	1	1	+	- 1	- 1
Males	1	-	Clos's Pyloric Orifice	1	1	1	- ;	1	-	- 1	- 1		- 1	ì	- 1	+	-	- ;	3
Females		1	:	-	1	1	1	- 1	- 1	_	- 1	- 1		1	- 1	-	-	- ;	
4 3 1 4 5 2 1 2 4 5 4 3 88 29 33	46 13	19	Cold	8	1	- 1	-	67	-	63	_	1	H		-	-	-	-	1
. 8 1 2 1 2 1 2 8 2 17 14 17	29 4	12	:	12	1	1	1	-	+	1	_ !	-	- 1	1	1	- 1	-	-	1
Females 1 2 1 2 4 2 4 8 1 1 21 15 16 1	17 9	-		1	1	1	-	-	7	03	į	1	-	1	1	+	+	-	1 1
Males 1 2 1	2	4	Colic, Bilions	ij	1	1	1	1	-!	1	- 1	-	1	1	1	-	- 1	- 1	1
Females	63	61	:	i	1	1	1	1	- 1	- 1	1	1	1	1	1	- 1	+	- ;	1
Total 1 2 2 5 5 4 6 4 4 4 37 28 9 1	17 19	17	Colie	88	1	-	1	1	-	1	1	-	- 1	1	H	-		- 1	-
Males 1 2 4 2 4 3 2 8 3 24 15 6 1	11 11		:	8	1	1	1	1	-	-	1	-	1	- 1	-	=	+	- ;	-
Females 2 1 3 3 2 1 1 13 13 3	80	7	:	22	1	1	1	+	-	1	1		1	i	1	+	- ;	- 1	- 1
Total 5 4 1 5 4 1	69	1	Constipation	1	-	Y	1	1	-	-	1	1	1	İ	+	1	-	- ;	1
Males 2 1 8 2 1	1	1	:	1	- 1	1	- 1	1	+	- !	1	1	1	i	. 1	1	+	- ;	1
Females 1 2 2	-	1		- 1	-	1	1	- :	-	7	1	į	1	i	+	+	- 1	- 1	:
Total 167 184 241 222 236 166 201 214 198 204 211 177 8 2424 2127 2051 1964 2138 1992	961 2198 11		Consumption	153	22	56 2	244 320 301 230 220 152 141 116	30 30	11 23	0 220	0 152	141	116	89	104	98	62 4	49	29 28
Males 73 95 124 86 102 87 107 75 84 89 100 78 3 1103 985 950 98	985 1025 9	912	=	20	12	13	80 135 131 104	15 13	110	4 96	3 79	76	57	2	62	46 3	22	27	16 18
							1	-		1		ì						l	l

TABLE 78.—Continued.—Specified Causes of Death.

	-	-	×	font	onths, 1888	1888			1	1	1	_	Ye	Years.							-	Age	Ages in Periods of Years,—1888.	Peri	spo	of Y	eare	7	888 -		-	3
	February.	March.	April.	June,	July.	August.	September	October.	November.	December.	Unknown,	.788I	18881	1882	.4881	18881	Causes of Death	Under 5.	5 to 10.	10 to 15.	15 to 20.	.08 of 62	.68 of 08	82 to 40.	40 to 45.	45 to 50.	20 to 22.	55 to 60.	.60 to 65.	70 to 75.	75 to 80.	190 and over
8	88	17.1	117 136 13		19 94	139	109	115	=	66	5 1321	11141	1101	1028	1178	1080	Consumption	88	12	44	164 19	185 17	170 126	8 124	73	65	29	8	63	50 81	23	13
- 1		1	9	1	3	1	1		3	- 1	- 1	-		7	1		Andrews III	į.	;	1	1	1	1	i	1	1		1	1	1	- 1	1
9	10	68	49	36 39	9 45	50	33	36	33	48	1 516	6 474	431	452	-436	314	Convulsions	470	-	9	10	9	-	63	63	63	1	- !	93	63	60	1
83	5	18	27 1	-	23 28	55	119	22	25	30	1 295	5 267	229	266	228	174	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	271	60	*	99	63	60	-		-	1	1	63	1	63	- 1
=	27	21	22 1	19 16	16 17	7 15	20	17	17	19	221	1 207	200	186	206	170	,	199	4	60	67	60	67	1	63	1		4	1	63	-	-
		- 1	- 1	1	-	- 1	1	1	1	3	-		63	1	63	1		1	-	1	1	- 1	1	-	1		-	i	1	-		1
-	1	-	+	1	-	- 1	1		- 1	1		- 1	1	1	20	-	Cough	- ;	- 1	- ;	-	1	1		- (1	-	1	-	1	-	1
- 1		+	- 1	1	- P	į	1	1	- 1	- 1	- !	-	-	1	90	1		1	- 1	- 3	1	- 1	1	- 1		1	1	3	1	1.1	- 1	1
13	9	-	13	10	1	00	62	=	16	139	6	711 06	104	46	40	52	Croup, Membranous	3 72	15	603	1	-	- 1	-	-1	. 1		1	1	1	-	
00	93	63	00	00	- 1	63	-	10	9	1-	+	16 68	57	82	24	27	=	33	7	1	-	1	1	-	-1	T	H	-	-	1	-	i,
10	4	01	10	63	1 1	-	-	9	10	9	4	49	47	18	16	25	" "	33	00	ca	1	-	- !	1	1	-	- 1	1	1	- 1	-	1
88	23	34	25 3	36 17	7 29	9 31	30	88	36	53	1 384	1 282	296	291	285	284	Croup.	339	25	00	H	1	4	-	9	- 1	1	1	1	- 1	-	-1
17	10	21	14 2	23 15	13 16	3 18	15	24	15	22	1 214	4 159	155	157	142	154		192	16	61	1	1	1	- 1	-	1	1	-	1		-	- 1
21	12	133	=	13	4 13	3 13	3 15	15	11	56	170	0 123	3 141	184	143	130	" "	147	22	-	1	1	1	-	- {			-	+	-	-	1
=	-	1	-	-	1	1	1	i	1	1	-0	67		20	- 1	- 1	Cyanosis	-	н	1	1	1	1	1	-1	1	1	+	1	-	-	1
-0	1	1	1	+	- 1	- !	1	- 1	1	1	- 1	-		1			,	-	1	-	1	-1	1	1	1	- 1	1	1	1	1	1	- 1
		- 7	- 1		1	-	1	- 1	1	=	7	67	5 30	13	-	1	Debility, Nervous	1	1	-	1	-	1	1	j	-	1	1	1		1	- 1
	i	1	1	- 1	-	-	1	- 1	1	- 1	-	1	-	10	1	1	, ,		1	1	- 1	-	1	-1	- }	-1		i	1	1	1	1
		1	- 1	- [- 1	- 1	- 1	1	- 1	+		-	1 21	00	-	-1	# #	- 3	1	V	1	3	1	- 1	3	-	1	1	1	1	7	i
8	19	98	33	21 21	1 29	9 43	53	88	14	31	. 318	8 239	912	282	287	274	Debility	193	1	-	1	-	1	60	2/1	10	10	23	18	20 22	12	16
13	15	-	7	40	-		-				_													_				-		-		

Females	7	-	10	19 1	12	8 14	83	8	20	4	12	1	149 11	114	98 15	121 12	157 133	B Debility		93	1	+	1	+	1	23	1	T	4	7	6	9 11		00	4
Unknown.	1	1	+	1	-1	1	1	1	1	- 1	1	- 1	1	- 1	1	00	- 1	3		1	i	1	-	-	- :	1	H	1	i	1	- ;	-	1	1	1
Total	H	1	67	-	-	1	1	-	-	- 1	1	1	9	17	00	4	00	9 Delirium Tremens.	mens.	1	1	-	-	-	-		93	- 1	H	1	- :	- 1	- 1	_	-1
Males	-	1	н	-	-	-	- 1	1	1	1	1	1	NO.	7	00	H	.00	:	;	- {	1	+	1	-	-	- 1	00	1	1	- 1	1	1	- 1	- 1	- 4
Females	- 1	- 1	-	1	-	1	1	1	1	1	1	-	H	1	1	00	1		:	1	1	1	1	-	1	- 1		1	İ	1	1	- 1	- 1	-	4
Total	*	9	6	00	-	10	4	7	10	10	oc	-1	71 6	19	89	92	49 5	58 Diabetes		00	-	4	10	10	69	7	9	00	н	9	4	-	9	62	i.
Males	00	10	10	00	9	60	H	NG.	8	10	#	1	21	38	16 3	87	33			61	7	qu.	ero	00	89	6.3	00	10	-	10	4	10	-	23	
Females	=	1	+	1	-	63	63	c)	-	1	4	-	20 2	83	62	1 38	16 1			-	-	কা	61	- 64	1	23	00	00	-	-	-	67			-1
Total	1	1	1	-	1	c ₀ 2	00	90	23	00	-	-	18	10	15 2	22	238	17 Diarrhea, Chr	Chronic	-	1	÷	- 1	-	-	- 1	-	1	63	00	50	_	_	9/3	1
Males	1	1	1	-	-	90	00	65	03	00	1	-	19	61	=	15 2	20 1	13	:	-1	-	1	+	-	1	-1	-	1	64	00	69	Ξ.		62	;
Females	-1	1	-	+	1	1	- 1	1	- ;	1	=	1	-	00	-#	2	99		:	-	1	1	1	-	-	- 1	1	1	1	÷	-	- 1	- 1	- 1	- (
Total	4	00	1-	8	11 28	88	8	73	21	11	12	55	355 39	38 36	363 23	239 386	8 250	0 Diarrhea		332	63	m	23	+	-	1	1	F	-	63	- 1	4	69	00	.;
Males	63	63	*	9	6 13	8 44	48	37	15	-	-	- 18	191 20	204 18	186 15	151 221	133			179	63	1	-	-	-	-	1	1	H	60	-	63	1	63	3
Females	63	1	00	01	5 15	288	47	36	9	4	10	16	164 19	195 17	177 8	88 164	111			153	- 1	-	=	-	-	- 1	-	-	1	1	-	63	93	-	4
Unknown.	1	1	1	-1	1	- 1	1	- 1	- ;		1	- 1	- 1	- 1	1		-	:		- 1	1		1	- 1	1	1	- 1	- 1	1	- 1	1	- 1	1	1	
Total	20	19	19	49	42 59	9 40	18	39	8	55	16	=	717 98	935 1117	17 1054	4 1065	5 1007	Diphtheria		856 2	224	73	88	00	9 9	1	- 1	64	=	-	1	1	- 1	-	=
Males	50	30	57	27 18	18 30	0 16	30	18	75	25	13	55	370 474		553 508	8 501	1 500	., 0		192	106	34	23	00	2 8		1	1	-1	-	1	- 1	-1	7	-
Females	22	25	27	22 23	24 29	9 24	23	30	40	36	8	65	347 461		564 551	1 563	3 507			164	118	39	15	10	1	1	1	H	=	+	- 1	- 1	_1	1	- 5
Unknown.	i		1	1	1	1	1	1	- 1	1	1	-	1	-	1	-	-	=		1	1	1	4	- 1	- !	- [- 1	i	1	- 1	1	1	1	- 1	- 1
Males	1	1	1	1	1	i	1	1	1	i	1	1	1	1	1	1	-	Drinking, Cold Water.	Water.	- 7	1	1	1	1	1	- 1	- 1	1	7	+	1	- 1	- }	- 1	- 3
Total	+	-	-	1		1	1	1		1	-	1	*	7	10	H	00	2 Dropsy of Bowels	wels	1	1	+	1	- 1	-	1	1	1	1	-	-	-	01		
Males	Ť	- 1	1	1	- ;	- 1	- 1	1	- ;	;	-		-	+	63	=	60	:	;	1	1	-	+	- 1	1	1	1	1	1	1	1	1	_1	- 1	
Females	1	-	-	1		1	1	1	1	1	1		00	00	00	-	-	:	•	1	1	+	- 1	1	-	1	1	1	1	1	1	- 1	23		1
Total	00	93	-	*	7	00	9	00	н	03	63	99	39	57	22	27 4	41 38	Bropsy of Brain	uin	63	91	1	00	1	1	i	54	-	1	-	1	1	- ;		7
Males	03	-	-	82	10	3	10	6.3	-	1	-		25	32	14	12 1	19 24	:	i	119	6.3	1	63	-	-	7	1	-	1	+	16	- 1	1	1	1
Females	-	64	-	-	=	.2	1	-	1	63	H	7	4	25	20 1	15	22	:	1	10	1	=	-	4	1	1	99	1	+	1	i	i	1	- (1
Males	1	1	-	1	-	:	1	1	1	1	1	1	93	65	-	-	-	6 Dropsy of Chest.	est	-	-	1	1	- :	1	1	İ	+	+	1	1	-	-	1	1
Females	-	-	-	-	1	1	1		1	3	7	-		-	-	::	_		:	1	-	-	-	-	1	1	ij	1	÷	1	1	1	1	-	11

TABLE 78.—Continued.—Specified Causes of Death.

				M		onths, 1888.	188	96							Years.	13.				_				ΨB	Ages in Periods of Years,—1888.	Pe Pe	ri 00	9	χ	18	88	œ			
	January.	February.	March.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown,	.8881	.7887	1888.	1882	1884.	1888.	Causes of Death.	Under 5.	.01 of 6	10 to 15.	15 to 20.	20 to 25.	.08 of 62	30 to 35.	85 to 40.	45 to 50.	50 to 55.	.09 cd 66.	.60 to 65.	65 to 70.	70 to 75.	.08 o3 gL	во впо отег.
Total	4	99	9	12 10	_	-	10	2	6	9	00	1	8	107	2	69	70	73	Dropsy of Heart	-	- 1	- 1	*	69	-	- 1	99	10	-	00	7 12	12	=	8	10
Males	90	=	90	00	41	22	63	6	20	7	67	.1	55	75	58	38	30	33	, ,	-	-	- 1	63	1	03	1	-	н	н	63	-	65	NO.	7	*
Females	63	64	00	4	00	0.1	99	90	9	20	9	1	49	52	35	31	40	88		- 1	1	- 1	63	63	61	1	67	*	-1	9	9	6	8	64	-
Males	1	1	-	-	1	- 1	-	1	1	1	1	- 1	7	1	1	1	1	1	Dropsy of Kidneys	-1	1	- 1	;	1	1		- 1	- 1	1	- ;	-		ij	1	1
Males	1	1	F	-	- 1	ij		1		÷	1	1	64	1	23	1	-	1	Dropsy of Liver	03	1	1	1	1	1	1	1	1	÷	- 1	- 1		- 1	- 1	
Females	1	1	1	1	-1	- 1	- 1	- 1	- ;	- 1	1	i	41	1	-	1	1	- 1	:	- !	-1	1	- 1			i		1	+	-	- 1	-	1	- 1	- 1
Total	25	23	88	31 37	44	4 32	2 40	39	39	49	55	H	462	338	533	330	324	296	Dropsy (unspecified)	24	7	00	12	00	00	18	26	52	30	255	34 54	57	46	33	82
Males	125	16	16	12 16	6 21	1 12	22	18	22	24	28	-	222	170	138	147	142	145		9	00	4	00	*	4	7	=	6	13	12 1	16 82	24	21	22	15
Females	13	16	55	19 2	1 23	3 20	0 16	3 21	17	25	27	- 1	240	168	195	183	182	151		41	4	4	*	4	4	=	15	18	- 1	13 1	18 22	25	25	15	17
Total	10	64	23	8 12		43 23	8 17	1 12	10	11	15	+	161	163	144	132	150	158	Drowning	20	119	80	31	18	41	9	9	4	60	4	-	63	1	-	-
Males	4	01	24	9 10	0 41	1 23	3 16	3 10	6	10	13	न	147	145	129	125	128	138	,,	15	15	29	31	17	13	9	9	*	00	4	-	_	ा ।	1	
Females	H	1	- 1	63	27	67	177	67	1	-	27	1	14	18	15	7	22	20	,,	10	4	1	-	-	-		- 1	-	- 1	,	-	-		1	
Males	1	i	1	1	-1	7	-	-	3	-	1	. 1	03	-1	00	-	-	6.3	Dysentery, Chronic.	- 1	- 1	1	1	1	1	1	1	1	1	-	-		1		
Females	1	1	1	1	1	1	1	- 1	1	- 1	1	İ	-	1	1	1	1	1		;	1	-	- 1	- 1	1	1	1	1	1	- 1	- !	1	-	1	1
Total	94	-	-	-	10	9 15	44	42	21	63	7	11	120	183	154	104	160	H	Dysentery	8	6	63	-	- 1	i	80	621	53	20	63	10		10	80	11
Males	-	-	- 1	1	-	90	4 19	9 18	6	-	90	1	65	88	8	51	82	99	"	- 45	10	-	-		4	-	1	03	-	36	-	_	63	-	10
Females	-	1	H	-	10	11 11	1 25	23	112	-	4	1	88	82	74	52	78	4	"	20	4	-	1	0.	1	63	-	-	00	63	-	_	99	62	9
Unknown.	1	1	1	+	+	- 1	1	1	-	-	1	i	- 1	- 1	1	-	- 1	H	,,	1	- !	-	- 1	- 1	1	1	- †	- 1	-	-	- }	1		- 3	- 1
Total	-	2/1	-	03	V	-	-	-		63	*	- 1	24	88	13	18	13	30	Dyspepsia			- 1	- 1	1	62	-	-	1	1	=	10	62	03	-	-
Males	1	63	-	63	1	1	23	1	23	1	4	1	16	22	00	11	12	18	,,	93	1	1	- 1	1	1	-	+	- 1	- 1	=	00	-	89	-	1
Fomelos	*			,	_		_			_																									

Total	-	:	9	Ť	4	1		4		:			a .	3	:	-	•	Embousm		1	1	1	1				-	_	1	1	1	
Males	-	1	1	1	-	1	1	1	1	1		63	24	-	64	-	63	*	1	A	1	1	+	1	1	1	+	+	-	-	1	4
Females	1	1	203		1	1	1	-	1	i	-	4	-	60	61	1	6.3	3	1	-	1	1		H	-	1	1	+	1	1	H	+
Total	63	10	7	9	+	-41	7.3	ю	9	Ħ		65	24	61	92	43	45	Epilepsy	-	9	80	10	10	9	2	10	00	1	4	93	63	+
Males	-	*	*	20	2.3	90		4	4	9	1	37 8	62	80	88	655	30		-	1	63	00	00	*	8	4	03		8	+	1	-
Females	H	00	63	00	61	-	60	-	01	10	:	28	1	6	11	11	15	;		2 1	1	6.3	61	9	-	H	1	1	1	1	03	+
Total	10	01	6	=	9	00	50	9	10	83	1	82 7	9 02	38	88	11	85	Erysipelas	19	0	63	00	10	10	64	-	4	10	1	93	9	4 12
Males	00	80	*	9	+	-	93	00	93	63	-	97	37	88	35	49	45	=	1	8	-	7	*	93	-	-	93	63	2 1	93	10	1
Females	24	22	10	10	63	-	-	93	99	H	1	36	33	25	88	63	40		=	1	-	63	-	67	-	1	7	03	- 27		н	-
Males	1	i	1	į,		+	1	1	- (1	-	-	- 1	-	;	12	8	Exhaustion	1	-	1	1	1	1	1	1	- 1	- 1	1	1	Ť	1
Females	1	- !	1	- 1	1	- 1	- 1	1	1	1	1	- 1	-1	- 1	- 1	10	10	,	1	- 1	1	-	1	- 1	1	1	- 1	1	- 1	1	- 1	1
Total	1	-	1	1	1	1	60	-	3	H	-	9	10	23	63	0		Exposure	-	67	Н	1	1	-	-	-	1	-	1	1	1	1
Males	1	-	1	- 5	1	1	62	-	. 1	1	-1	+	93	62	-	4	10	:	- 1	1	1	1	-1	-	1	+	-1	=	- 1	- 1	1	-
Females	1	- 1	1	-	1	1	- (- 1	1	H		63	03	-	-	10	1	:	-4	63	- 1	-	1	1	1	1	1	1	-	-	-	-
Total	-	6 9	1	1	1	1	63	63	63	H	1	29 2	25	17 2	255	21	17	Falling Tree	- 1		-	10	4	*	4	-	63	10	67	1	1	-
Males	-	8	-	- [1	- 1	60	20	63	1		28	24	17	25	18	17	" "	- 1	1	1	NO.	*	+	89	-	63	10	62	1	1	1
Females	1	-	1	1	1	1	- 1	- 1		1	:	1	1	- 1	1	63	- 1	" "	1	1	1	1	+	1	-	1	- 1	-1	1	1	1	:
Total	00	-	03	1	00	00	63	- 1	9	93	-	30 2	21 2	22	77	88	28	Fever, Bilious	-	8 8	10	67	-	=	2 1	-	63	12	-	91	1	н
Males	-	63	-	-	H	- 1	- 1	- 1	9	63	-	15	9 1	65	1	20	16		-	89	Ø	1	+	1	-	-	63	-	- 1	1	-	- ;
Females	61	62	63	1	63	95	62	- 1	- 1	-	-	15	22	6	01	18	12	,	1	61	60	63	-	=	67	i	1	-	-	1	1	-
Total.	1	_	67	1	1	3	- 1	1	-	62		10	00	9	20	10	9	Fever, Catarrhal		20	1	1	+	1	1	1	1	+	1	1	Ť	1
Males	1	1	7	- 1	1	1 2	- 1	1	- 1	40	1	00	9	03	-	00	00	:	1	1	1	-	+	1	1	i	i	+	1		1	-
Females	1	-	-	1	1	1	- 1	- 1	1	1		63	01	60	+	69	00	:		63	1		+	1		1	1	1	4	1	- 1	1
Males	1	1	1	1	15	1	- 1	1	1	1	1	-	- !	1	-	54	-	Fever, Congestive	1	1	- 1	1	+	- 1	-	1	1	+	1	- [1	1
Females	1	1	1	- 1	1	- [1	- 1	1	1	1	1	1	=	1	1	-	:	-	1	1	1	1	-	1		1	+	1	1	1	1
Total	69	1	ਜ	-	1	00	93	00	- !	1	-	13	8	9	9	9	9	Fever, Gastric	-	8	74	1	-	=	1 1	1	+	1	1 2		63	÷
Males	1	- 1	15	1	- 1	1	57	1	1	1	1	03	67	4	1	-	63	:	-	-	-1	1	+	1	1	1	1	1	1	1	H	1
	-		1						Ī	Ī				-			7	:	_			Ì		_	1		t				,	-

TABLE 78.—Continued.—Specified Causes of Death.

					Mo	nth	Months, 1888.	88							Ye	Years.									Ag	168	пР	erio	Ages in Period of Years,—1888.	Ye	ars,	8	œ.			
Sex,	January.	February.	March.	April.	May.	June.	August.	September.	October.	November.	December.	Unknown.	,888I	,788I	18881	.4881	.1881	18881		Causes of Death.	Under 5.	5 to 10.	.dt of 0I	15 to 20.	20 to 25.	25 to 80.	30 to 32.	85 to 40.	40 to 45.	45 to 50.	50 to 55.	.60 to 65.	65 to 70.	70 to 75.		75 to 80.
Total	1	1	1	in	-	60	00	00	00	-	-	+	33	15	83	18	3 21		21 Fe	Fever, Intermittent.	10	00	00		- 1	- 1	:	99	H	1	-	1	1	-	-	
Males	1	1	- 1	-	7	04	H	-	+	1	-1	+	-	-	10	10		1 01	13		63	60	1	1	1	1	1	- 1	-	1	H	1		-		
Females	1	- 1	-	4	1	H	63	6.1	02	-	н	-	15	00	15	13	11		6		00	-	00	1	1	- 1	1	90	Ì	1	- 1	1	- 1	- 1	\div	
Total	00	7	=	13	6	00	6	61	20 1	18	71	- 00	144	109	130	84	1115		81 Fe	Fever, Malarial	47	10	11	1	00	13	00	13	63	10	H	9	10	10	-	
Males	*	*	10	6	4	03	-	1	2	6	9	10	99	55	64	42	53	- 1	11		25	00	93	10	10	8	10	-	1	*	- 1	00	03	-	-	6.3
Females	4	00	9	4	10	8	10	121	13	0	00	1 00	78	54	38	7		62 4	05		22	7	00	9	93	7	00	4	63	-	-	02	00	4		63
Unknown.	1	- 1	1	-1	1	+	1	1	+	4	1	4	1	1	- 1			-			1	1	- 1	- 1	-1				1	1	Ti.	- 1	-	:	- 1	
Females	-	-	1	Ì	1	-	1	1	+	- 1	-1	- ;	-	-	10	-		1	1 E	Fever, Milk	1	1	- [-1	- 1	1	1	1	-	1	-	1	1	- 1	- }	
Total	1	1	H	1	- 1	1	1	-	1	+	1	-	4	-	-	90	63	00	S Fe	Fever, Nervous	- 1	- 1	1	1	-	- 1	į	- (-	H	1	+	- ;	- 1	
Males	- }	1	1	1	1	+	- 1	H	-1	- 1	1		-	-		_	-	-	03		- 1	1	i	1	- }	- 1	1	- 1	- 1	1	=	1	+	+	- :	
Females	- 1	1	-	1	1	-	1	4	- ;	+	-	-	90	1		63	-	01	1	, ,	1	- 1	1	1	-	- 1	:	1	-	-	:	1	F	-:	-	
Males	-	-	1	1	1	1	1	1	1	=	- 1	-	03	63		**	63	-	E	Fever, Remittent	1	-	-	1	1	-	1	- 1	- 1	T	-	1	+		- :	
Females	-	-	1	1	1	1	+	1	+	+	1		-	-	-	1		03	1		1	- 1	1	1	- ;	- 1		1	1	Ť	1	- (+	-;		
Total	1	63	-	1	-	1	03	+	1	00	-	-	12	=	-	00		9	12 F	Fever, Rheumatic	-	4	1	1	-	1	4	60	1	Ť	1	H	- 1	- 1	- 1	
Males	- 1	н	1	1	H	1	4.	- 1	1	-	-	=	30	4	-	_	10	4	*		1	671	1	-	-	1	1	-	- 1	1	:	,	+	- 1	- 1	
Females	1	1	-	1	1	1	1	1	-	63	1	- 1	4	-	00		63	10	00		1	27	1	- 1	1	- 1	j	1	1	Ť	- ;	1	1	- ;	- 1	
Total.	10	7	8	6	4	00	4	6	9	*	10	*	74	79	77	74	107		104 Fe	Fever, Spinal	42	a	7	9	03	- 1	Н	00	1	-1	1	-	=	+	-	_
Males	60	ro.	4	9	-	*	03	*	-	63	60	-	36	43	33	42	_	52 6	19		18	4	4	*	90	- 1	1	-	- ;	- 1	1	н	+	- 1	-1	
Females	02	63	10	00	93	4	-	10	10	63	63	. :	88	88	#	33	_	12	92		. 24	10	92	63	- {	- 1	-	63	- ;	1	- 1	+	-	- 1	•	
Males	1	-	1	1	1	+	+	1	-	+	1	- 1			-		03	-	2	Fever, Spotted	1	- 1	1	1	1	1	1	1	3	- 1	- 1	i	+	-9	- ;	
Females					f	-	-	-	-	-		-	_	_	_	_			,															-	_	

Total	23	31	36	2	28	19 2	28	62 98	3 134	73	29	-	638	077	498	387	214	439	Fever,	Typhoid	57	41	63	8	68	89	39	46	23	28	0	16 19	12	#	8	*	=
Males	15 17		17	16	19	10 2	20 3	32 53	8 78	8 48	88	-1	353	439	262	210	281	252	:	:	30	24	36	46	8	8	24	22	=	18	1	7 11	6	5	65	64	6
Females	12 14	14	18	26	6	6	80	30 45	2 26	25	25	-	282	331	236	176	252	187	:	:	27	17	527	39	41	20	12	21	12	101	13	8	00	9	03	64	63
Unknown	1	1	1	1	+	1	+	1	1	1	1	1	1	i	1	-	-	i	:	:	1	1	1	1	1	1	1	1	+	1	-1	- 1	1	- 1	1	- {	3
Total	1	ĭ	*	62	=		03	2	10	4	1	1	25	52	22	-	53	=	Fever, 1	Fever, Typho-malari'l	50	03	4	4	H	63	61	ľ	00	=	=	03	63	-	-	1	-:
Males	1	1	-	6.5	1		63	99	90	63	1	;	16	22	12	20	17	6	3	:	63	6.3	93	03	11	-	-	- ;	-	1	-	1	03	1	-	- 1	
Females	- 1	1	00	-	-	- :	1	**	03	63	1	1	15	22	10	63	12	63	=	:	-	-	-	6.1	н	-	-	1	60	-	-	01	7	=	- 1	- 1	-1
Total	1	1	1	1	- 1	6.3	+	1	-	-	1	1	00	-	60	-	KQ	11	Fever, Typhus	Cyphus	-	1	-	-	1	1)	1	1	- 1		1	1	1	- 1	13
Males	1	1	i	1	1	5	+	1	- 1	1	1	. 1	67	*	-	- 1	1	7	:	3	1	- ;		-	1	· i	-	7	1	1	- 1	1	- 1	- 1	1	- 1	- 1
Females	1	1	1	-	+	- 1	1	- ;	-		- 1	- 1	1	92	-	1	10	4	:	:	I	- 1	-	-	1	1	1	1	1	1	-1	- 1	- 1	- 1	- 1	- 1	- ;
Total	9	0	00	10	9	8	12 10	10 15	11	12	*	,	112	78	28	88	13	73	Ге тег, (Fever, (unspecified)	#	10	4	00	=	10	63	-	93	00	=	60	60	00	*	1	-
Males	6/1	+	+	'n	10	10	-	63	61	9	1	1	47	36	38	20	43	37	=	:	83	00	H	61	4	-	-	4	1	00	1	-	1	63	63	- 1	1
Females	4	10	4	10	-	00	00	7 18	**	9	4	-	65	42	67	88	36	36	:	:	21	-	00	9	-	+	75	00	63	1	-	24	67	-	63	-	1
Males	- 1	1	1	1	-	1	- 1	1	- 1	. !		3	- 1	00	-	-	1	3	Fistula.		1	- {	1	1	;	1	1	1	-	1	1	- 1	į	1	1	1	:
Females	- ;		Ť	-	1	1	- {	- 1		-1	1	1	- 1	1	61	1	1	- 1	:		- 1	- (-			1			1	- 1		1	į		- 1	- 1	
Males	4	14	1	1	- 1	1	- 1	1		1	- 1	1	- 1	1	1		-	- 1	Fractur	Fracture of Arm		1	1		1	:	- 1	- 1	- 1	1	-}	- 1	- 1	- 1	- 1	1	- 1
Females	-	1	н	=	- 1	1	1	1	- 1	-	1	1	*	1	1	1	1	1	Fractur	Fracture of Hip	1	1	1	- 1	-01	1	1	-	1	1	- }	- 1		1	-	-	1
Total	1	-	1	63	-1	-	-	_	-	1	1	1	9	7	NO.	63	12	-	Fractur	Fracture of Leg	-	- 1	1	-	1	-	1	- 1	-	- 1	=	- 1	-	1	-	- 1	-
Males	- 1	1	- {	03	- 1	1	1	- 1	1	- 1	- 1	+	00	8	63	63	9	9	:	;	1	-1	1	1	1	-	- ;	- 1	-	1	- 1	- 1			- 1	_ (н
Females	1	+	1	1	1	1	-	-	1	- 1	1	1	60	-	200	- }	9	7	:	:	1	1	1	- 1	1	1	1	1	1	1	-	- 1	-	j	-	;	-4
Males	1	1	01	=	1	+	1	- 1	77	1	1	- 1	**	10	-	00	67	64	Fractur	Fracture of Neck	1	1	1		-	1	-	1	1	+	1	-	1	1	1	- 1	- 1
Females	1	1	1	1	1	+	1	- 1	- 1	1	1	i	1	+	j	-	=	1	:	:	-	- 1	- 1	1	1	1	+	1		-	+	- 1	i	- 1	3	1	- 1
Males	- [61	H	1	H	1	-	1	-	1	1	3	9	14	12	10	9	00	Fractur	Fracture of Skull	27	- }	1	3	63	4	1	=	1	1	-	1	1	1	- (- 1	
Females	ţ	1	1	1	1	- 1	1	1	1	1	-1	1	1	1	-	1	1	67	:	:	i	1	- 1	1	1	1	1	1	-	- 1	-1	1	1	i	1	. (- 1
Males	1	1	1	1	1	1	1	7	-	1	- 1	,7	2/1	*	63	-	-	80	Fractur	Fracture of Spine.	1	-	1	- 1	H	1	i	1	-	1	1	- 1	į	1	1		- 1
Males	1	4	=	T	1	1	- 1	-	1	-	1	1	93	-	F	1	63	-	Fracture		;	1	- 1	- 1	i	1	1	-	-	+	- 1	1	- }	- 1	1	. !	1
Females	- ;	1	i	1	1	1	3	- 1	-	1	1	i	1	00	ea	00	1	-	:		-1	1	- 1	1	1	1	;	1	1	1	- 1	1	1	1	1	- }	1).
Total.	=		-			-	-	-			- 1		23	1	19	9	1	1	Freezing	80	1	:			-	-		7	-	-	_	_	- 1	1	-	- 1	-1

TABLE 78.—Continued.—Specified Causes of Death.

					Mo	nth	Months, 1888.	888					_		-	Years.		1							Ag	es i	n Pe	orio	Ages in Periods of Years,—1888.	f Y	Sars	7	888				
Sex.	January	February.	March.	LirqA	Мау.	June,	July.	August.	September.	October.	Лочетьет.	December.	Unknown.	.8881	'. _{LSST}	.3881	.6881	.1881	1888.	Causes of Death.	Under 5.	5 to 10.	10 to 15.	15 to 20.	20 to 25.	.08 of 65	.68 of 08	35 to 40.	.64 of 04	45 to 50.	.66 ot 05.	.08 of 55	.60 to 65.	.07 of 65	70 to 75.	75 to 80.	80 and over.
Males	-	- 1	1		1	1	1		1	- 1	1	- 1	- :	-	H	*	9	-		Freezing	- ;	- 1		- 1	- ;	- 1	1	1	-		1		- 1		- 1	- 1	1
Females	1	1	-	1	1	1	1	1	;	-	1	1	1	-	- 1	=	1	1	1		-	1	- 1		:	- 1	- 1	- 1	- 1	1	1	- 1	- 1	1	-	- 1	
Males	1	1	1	- 1	1	4	- 1	1	1	1	1	- 1	-1	-	-	1	=	i		Fright			1	-1	1	1	1	-	1	i	1	- 1	- 1	- 1		-	- 1
Females	- }		1		1	1	1	1	i	1	1	1	1	+	- 1	H	H	-	1		1	- 1	- !	- 1	;	1	1	- 1	- 1	1	1	- 1	- ;	1	1	-	- 1
Total	- {	-	. ;	-	-	-	-	1	- 1	-	-	1		40	-	1	6	10	63	Gall-stone	1	i	:	:	1	-1	1	1	2/3	-	-	- 1	1	- 1	-		- 1
Males	1	1	1	. !	1	-	1	1	1	1	1	1	:	-	63	10	00	-	63			1	1	- 1	1		1	1	-	- 1	-	1	1	1	1	1	- 1
Females	- ;	-	- ;	-	1	1	-	1	1	-	-	- 1	. 1	*	10	61	9	4	1			- 1		- ;	1	- {	- ;	-	-	-	-		1	- 1	1	1	-
Total	į	;	64	- 1	24	-	01	*	1	671	H	*	- 1	18	12	21	20	16	18	Gangrene	-	-1	- ;	- 1	1	1	- {	1	2/	1	1		+	10	-	9	63
Males	- 1	1	6/1	1	63	-	03	99	1	60	H	00	-	16	10	14	13	7	10		7		- ;	1	- 1	1	- ;	- 1	-		1	- 1	-	40	н	9	1
Females	. !	1		1	1	-;	- ;	-	1	1	-	=	-	93	63	1	7	0	00		- 1	- 1	- }	- 1	- :	- ;	•	1	+	- 1	1	1		1		- 1	-
Males	- 1	1	1	1	1	-	- 1	- 1	- 1	1	1	1	- !	:	-	-	1	1	1	Glandular Disease	1	- ;	- }	- 1	1	- 1	- }	1	-		1	1	- 1		- 3	- ;	1
Females			1	1	1	1	- 1	1	- 1	=	i	1	1	-	+	1	-	-	-	:	-	1	- 1	- 1	- !	1	1	1	- 1	- }	-	1		-	1	- 1	- 1
Females	:	1	1	1	- 1	- 1	- 1	- 1	H	1	- 1	1		-	-	1	i	-	1	Goitre	- 1	4	- 1	-	- 1	1	1	1	:		-	1	1	1	1	1	i
Females	1	- 1	1	1	1	- :	-1	- 1	- 1	1	- 1	- 1	+	4	-	1	i	-	1	Gonorrhea	1		- }	j	1	- 1	1	- 1	1		- 1	1	T	i		- 1	- 1
Males	- 1	1	1	1	1	1	1	1	1	1	1	1	1	1	+	1	7	-	1	Gout	- 1	1	- 1	1	1	1	1	1	- :	1	-	- 1	1	1	1	- 1	1
Females	-1	1	i	1	1	+	1	1	-	1	-	-	- 1	-1	1	-	=	- 1	1		- 1	- 1	- ;	- ;	- ;	1	- 1	1	1		- 1	1	1	1	1	- 1	- 1
Total.	-		П	-	i		*	- 1	93	1	03	64	-	7	16	=	21	15	16	Gravel	-	:	- 1		-	- 1	н		-	- 1	-	-	1	03	03	00	- 1
Males	-	1	1	-	-	-	4	1	23	:	63	63	1	13	15	1	19	14	11		-	- 3	;	1	1	- {	1	- 1	-	1	-	-	1	93	61	00	- 1
Females	- 1	1		1	1	- 1	+	1	-	- 1	Ť	-	7	-	H	4	61	-	63	1	1	;	- ;	1	1	i	н	1	1	1	-	1	1		1	-	- 1
Males		1	1	-	1	23	1	-	-	61	03	KO	1	16	=	17	13	10	88	Gun-shot	1		-	*	- 1	90	90	93	1	1		-		- ;	1	-	- 1
		П				-	-				-		-																Ī	Ī		Ī	Í		Ī	T	J

Females 60 Total 60		i	1		6	-										-	,	_							_	_					_	_	-	_		+	-
						-	:	-	-	1	:	00	100		1	:2	7	:	=		-	57	-	- 1	1	-	-	- :	1	-	-	1	1	1	;		-
-	62 (70	E	12	20	7.	12	72	57	65	88	88	750	699	899	828	626	Heart,	t, Disease of	9		6 15	5 25	23	31	1 35		42	40	46	59 7	71 9	94 104		8 16	2	34 7
-	43	35	2	47	43	88	2	4	30	35	50	2 488	431	375	386	820	342	:	=	88	00	-	4 16	8 11	119	9 17		25	22 2	21 33	32	39	57 6	9 09	63	49	19 5
Females 28	36	31	28	88	27	200	53	82	27	98	45.2	2 375	329	294	279	298	284	:	=			2 11		9 13	3 12	18		17 18	18	25	27	522	87 4	4	28	32	15 2
Unknown.	-1	F	1	1	1	-	1	4	* 1	1	-	-	- 1	1	-]	-	1	:	:	-	-	1	- 1	1	- 1	-	- 1	- 1	-	1	1	1	- 1	-	- ;	-	+
Total	1	1	-		=	3	н	00	00	-	H	=	6	-	2	4	2	Heart	Heart, Enlargeme't of	100	-	1	1	1	1	-	-	=	63	1	1		0.3	-	-	63	+
Males	1	4	-	1		1	1	67	-	-	H	9	99	9	4	20	10	:	3		-	1	1	1	1	-	_		1	1	1	1	-	1	-	-	1
Females	- 1		1	1	-	-	н	-	03	+	+	10	9	-	-	-	63	:	:	1	- 1	1	-1	-	1	1	-	-	67	- 1	- 1	-	+	;		=	7
Total	- 1	E	1	-	1	1	-	-	1	-	+	10	9	00	80	1	90		Heart, Fatty Degen.of	-1	-)	- !	- 1	1	-	i	1	-	-	- 1	r	63	- ;		63	- 1	+
Males	- [- {	-	- 1	1	1	-	-	1	-	- 1	60	10	_	1	-	10	:	:	- 1	- 1	-		1	-1	- !	1	- 1		1	,	09		-;	-	-	-
Females	1	-1	1	H	1	1	4	1	- 1	-	+		1	0.0	6.3	1	00	:	:	i	- 1	1	- 1	1	- 1	i	- 1	-	-	1	-	+	1	1	63	- 1	1
Total	-	- 1	60	-	63	-	03	1	1	-	1	10	64	0.5	-	-	8	Heart,	, Inflam. of	-1	1	1		-	-	3	1	-	63	-	-	+	-	02	- 1	- 1	1
Males	j	- 1	63	-	=	7	=	1	- 1	1	1	10	1	2/3	-		4	:	;	j	- 1	1	_	1	-	1	- 1	-	63	1	1	- ;		-	- 1	- 1	- 1
Females	1	1	-	- 1	-	-	-	- 1	- 1	1	- 1	10	63	-	1	3	10	:	=		- 1	1	- 1	-	- ;	1	1	1	-1	7	-	1	- 1	63	1	- 1	-
Total 2	*	H	00	01	-	-	-	-	00	63	2	25	34	17	27	27	16	Heart	Heart, Neuralgia of	- 1	1	-1	40	-	61		00	63	20	-	99	-	2	9	-	4.0	99
Males 2	П	1	*	-	-	63	-	1	6.0	-	00	18	16	-	12	14	6	=	3	14	1	1	1	j	63	-	1		63	-	65	-	-	4	63	-	-
Females	90	-	*	· i	-:	24	1	-	-	-	63	16	18	10	15	13	7	=	3	i	-1	- 1	63	-	1	60		03		j	-	4	-	64	23	-	00
Males	1	- 1	1	1	1	1	1	- 1	-	1	- 1	- 1	1	1	1	1	-	Heart,	, Ossification of	- 1	1	- 1	1	- 1	1	1	- 1	1	-1	1	- 1	1	- 1	-1	1	- 1	+
Females	1	.1	1	-	1	1	- 1	- 1	- 1	3	-	1	1	-	-	1	-	:	;	1	1	1	1	1	-1	1	1	1	1	1	-1	- 1	1	1	1	-	-
Total.	-	-	-	1	+	1	-	- 1	- 1	- 1	1	4	-	1	-}	i	1	Heart	Heart, Palpitation of		1	1	-	- 1	- 1	-	- 1	-	1	- 1	1	1	1	-	-		-
Males	- 1	1	-	1	-1	3	-	- 1	-1	- 1	1	63		1			1	:	:		1	1		1	1	i		=	1	- 1	-1	- 1	- 1	-	1	1	- 1
Females	-	H	3	1	-	-	- 1	- 1	- 1	- 1	- 1	67	1	1	1	1	- [=	3	1	1	1	- 1	1	-	-	1	1	1	1	1	1	1	1		-	- 1
Total 4	Н.	93	04	-	60	*	10	*	-	-	*	35	833	23	83	27	14	Heart,	, Paralysis of.	-	23	-	62	63	-	1	63	17	60	6.1	60	63	65	*	60	-	-
Males 2	н	-	-	1	-	00	6.3	-	-	-	64	15	19	12	10	14	7	:	:	-	1	1	-		- 1	1	-	-	01	63	-	-	-	01	2	-	-
Females 2	- 5	-	н	н	60	-	85	00	-	00	63	30	11	13	15	13	7	:	:	1	63	1	-	01	7	1	П	1	-	-	_	-	61	63	1	-	-
Males	- (-	1	1	1	-	- 1	-	1	1	- 1		00	1		1	1	Heart	Heart, Rupture of	1	- (1	- 1	i	-1	i	1	1	i	1	1	1	1	1		1	1
Males	- 3 Y	-	1	-	-	-	-	-	-	=	-	00	NO.		1	1	03	Heart	Heart, Valvular Dis.of	1	-	-	- 1	-	- 1	1	_	-	_	_	_	-	-	- :	-	-	-

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TABLE 78.—Continued.—Specified Causes of Death.

				-	Mon	ths,	onths, 1888.	8				- 4			Years.	gi							4	Ages in Periods of Years,—1888.	ij	Peri	ods	of y	ear	7	888				
Sex.	January.	February.	March.	April.	May.	July.	Angust.	September.	October.	November.	December.	Unknown.	18881	.7881	1886.	.3881	.4881	18881	Causes of Death.	Under 5.	5 to 10.	.61 of 01	15 to 20.	20 to 25.	25 to 80.	80 to 85.	85 to 40.	45 to 50.	.66 ot 06	.05 to 60.	.60 to 65.	65 to 70.	370+07	70 to 75.	75 to 80.
Females	i	1	- 1	- 7	- 1	1	1	_ [1		1	- 1	7	NO.	93	1	-		Heart, Valvular Dis, of	-	- 1	1	- 1	1	- ;	-1	- 1	-	- 1	- 1	- 1	- 1	- 3	-	-
Males	1	1	1	1	A	1	1	1	1	1	7	1	1	63	1	1	1	1	Hemorrhage of Bladd'r	-	ż	1	i	1	1	- 1			- 1	1		- 1	- 1	-	
Females	1	1	1	- 1	1	1	- 1	1	j	1	1	- 1	1	1	1	į	н	-		ij	1	1	T	1	1	1	- 1	- 1	- 1		1	1	7.3		1
Total	H	1	-	-	=	1	1	- 1	77	1	-	. }	9	F-	00	10	15	6	Hemorrhage of Bowels	es	1	-	1	H	-	- 1	- 1	-	1		1	-	1		1
Males	-	1	-	-	-	- !	1	1	- }	- 1	1	- 1	10	10	*	1	6	4	:	1	1	1	1	+	1	1	- 1	-	_	- }	1	-			-
Females	1	1		1	- 1	- 1	1	i	7	1	3	1	H	63	4	10	9	10	**	-	- 1	1	1	1	1	- 1	-	-1	- 1		-1	- 1	- 1		1
Total	1	1	-	-	-	1	- 1	1	i	- 1	1	-	99	9	00	1/3	0.1	0.3	1 or'h'ge of Brain	1	- [- 1	- 1	1	- 1	- 1	-	-			T	-	- 1		1
Males	1	1	1	H	1	1	- 1	1	- 1	1	1	1	69	00	-	93	60	63	:	1	1	1	i	i	4	-		-	1	1	1		1		-
Females	1	- 1	-	- 3	- 1	1	- 1	1	1	- 1	1	3	T	00	23	2/1	- 1		,	Ť	1	1	T	1	+	- 1	+	4	- 1	-1	- 1	-			4
Females	- 3	1	- 1	1	-1	- 1	-!	- 1	- 1	į	1	1	1	i	1	- 1	1	1	Hemorrhage of Kidneys	en :	1	1	1		-	- :	- 1		- 1	- 1	:	1	- 1	1.0	4
Total	1	00	03	23	H	9	63	-	03	23	-	1	27	40	30	31	22	24	Hemorrhage of Lungs	1		i	-	4	6/3	-	02	63	67	-	62	61	63		P
Males	-	20	-	03	1	4	1	-	63	-	63	1	17	25	25	24	16	14	3	1	-	1	=	- 1	-	00	63	-	-	1	93	63	н		-
Females		:	-	1	=	21	63	1	-	-	03	1	10	15	10	F-4	9	10	1	-	1	- 1	1	4	H	-	-	-	_	1	1	1	-		-
Males	- 1	1	1	1	1	- 1	1	1	1	-	1	- 1	1	1	-	1	1	1	Hemorrhage of Nose	9	1	1	i	Ť	-	- 1	- 1	+		- 1	- 1	1	1		-
Females	1	1	1	-	1	1	-	1	1	- 1	1	1	-	1	1	-	1	1	1	1	- 1	1	1	1	=	+	1	1	1	1	- 1	1	i		-
Total	- 1	-	1	H	1	- A	- 1	1	-	- 1	-	4	+	10	61	H	NO.	63	Hemorrhage of Stom'ch	1	1	1	T	1	-	-	-	57	_ !	-	1	i	1		+
Males	1	1	1	1	-	1	1	1	-	1	-	1	93	02	63	1	ro.	21	n	- 1	- {	1	T	1	1	+	-	63	1	1	-	-	1	0	-
Females		1	1	-	1	1	1	- 1	- {	1	1	- 1	-	63	1	-	-	-		1	1	1	1		- 1	-	-;	- 1		-	;	1	1		-
Males	1	1	1	1	1	+	- 1	1	- 1	1	-	1	1	1	- 1	1	9"		Henorrh'ge, Umbilical		i	1	i	1	4	+	- }	- 1	- 1	-1	- 1	- 1	1	1.	
Females	1	1	1	1	1	1	- 1	1	- 1	1	1	1	i	1	61	- 1	H	63		1	- {	1	Ì	1	1	+		-	1	- 1	- 1	-	4		÷
Famalas	3	7	-	-		_	_	_			-		1		-				Carried Account of								_								-

Total	-	04	63	00	+	2	07	-	1	q	•	1	200	97	q	1	T	4	Hemorrhage		-	:	0	4	7	1	-	-	:	0	1	:	20	-
Males	4	1	1	02	00	21	00	-	63	-	1	- 1	21	10	00	00	7	6	=	00	- 1	- 1	64	-	1	-	03	1	- 1	Н	67	-	2	-
Females	-	-	-	b t	-			1	- 4	-	-	1	6	9	10	0.	90	10	=	-	1	Ţ	+	1.	-	-	-	1	1	63	i	-	-	-
Unknown	-	1	-1	7	4	1	1	1	- 1	1	1	1	1	1	1	-	1	1	:	1	1	1	1	1	+	+	1	1	. !	1	1	-	- ;	- 1
Total	-	40	00	9	-	10	23	6 2	4	1	70	- !	87	28	27	22	23	30	Hernia	*	1	H	1	1	67	4	1 2	67	00	62	10	10	02	63
Males	1	-	-	93	-1	10	-	63	23	1	00	-	63	14	8	12	16	19	*	22	1	-	1	1	64	00	1 2	-	-	н	60	61	93	- 1
Females	1	-	63	00	-	7	-	63	41	-	93	- 1	17	27	12	13	7	11	;	-	1	i	i	1	1	-:	-	6/1	63	1	63	00		67
Males	1	i	1	1	- 1	1	1	1	1	1	1	1		-	-	-	-	1	Hiccoughs	1	1	1	1	1	1	1	1	1	-	1	1	+	- 1	+
Females	1	-	1	1	-1	-	1	- 1	- 1	- 1	4	- 1	1	1	H	1	1	1	:	-	- 1	-1	1	1	1	+	-	- 1	- 1	1	-	- 1	- 1	- 1
Total.	-	1	1	-	23	-	1	1	63	1	- 1	1	7	9	9	6	9	1	Hip Disease	1	63	- 1	1	6/1	-	+	- 1	- 1	- !	1	1	+	-1	-
Males	-	1	- 1	1		-	_	- 1	-	1	- 1	1	4	4	6.9	4	4	1		1	1	1	1	-	-	-	-	- 1	1	1	1	+	1	-
Females	1	1	3	1	63	1	- 1	- 1	-	- 1	- 1	- 1	-00	60	*	10	63	1	:	1	63	1	1	-	+	1	- 1	-	1	İ	1	+	1	- 1
Males	1	H	4	7	- 1	- 1	1	1	1	1	- 1	- 1	-	1	1	-	į	99	Hydrocephalus	-	- 1	1	1	1	1	1	1	- 1	1	-	+	+	- 1	1
Females	1	ï	- 1	3	- 1	- 1	-	1	- 1	- 4	- 1	1	1	1	1	-	99	63	=	1	- 1	1	4	1	1	1	- 1	- 1		- 1	1	1	- ;	-1
Males	1	1	1	- 1	-	1	1	1	1	1	- 1	1	1	63	1	7	H	1	Hydrophobia	1	-1	1	4	1	-	- 1	1	1	- 3		i	+	- 1	-
Females	1	-	i	1	- 1	-	- 1	- 1	1	- 1	1	- 1	-	1	-	1	-	1	*	-	1	-	1	1	1	+	-	1	:	1	+	+	- ;	+
Total	*	03	1	1	67	63	_	20	1	-	- 1	1	18	6	20	13	88	24	Inanition	19	-	1	- 5	1	+	1	-	1	1	1	+	+	1	+
Males	-	-	- 1	-	03	63	_	23	1	- }	1	-1	7	7	00	10	0	13		п	-1	1	1	1	1	- 1	1	i	1	-	1	+	- 1	-1
Females	00	F	1	+	- 1	-	- 1	63	1	1	1	- 1	00	63	=	00	13	11	1	00	-	-1	1	1	1	1	+	- 1	:	j	1	+	+	+
Unknown.	- 1	1	1	- 1	- 1	- ;	- 1	- 1	- 1	1	1	1	1	1	-	1	i		:	1	1		1	1	+	- 1	-	1	1	4	1	1	- 1	+
Total	-1	-	1	01	1	00		93	1	63	93	-	16	55	13	11	1	6	Indigestion	10	- 1	1	1	1	1	1	1	63	i	H	-	-	1	-
Males	1	1	i	-	=	-	_	-	1	1	63	1	00	20	-	8	4	7	**	4	1	1	1	1	1	1	1	67	1	1	=	+	- 1	+
Females	= {	H	1	-	1	64	-	-	1	1	1	-1	00	O.	9	10	P	64	=	9	-	1	1	1	1	1	1	-	1	-	Ť	+	- 7	+
Males	1	1	1	- 1	1	- 5	-	- 1	- 1	- 1	- }	- 1	1	1	-	1	-	i	Infanticide	-	-1	1	1	- 1	+	+	1	1	i	1	1	1	- 1	- (-
Females	1	i	1	1	-	i	- 1	_	1	- {	- 1	- 1	1	1	1	1	-1	63	**	- 1	- {	1	1	- 1	-	-	-	1	1	1	1	+	- 1	+
Unknown_	i	1	1	- 1	- 1	- 1	1	- 1	1	i	1	- 1	1	1	1	H	1	- 1		:	1	1	1	1	1	+	÷	1	- 1	-	1	+	-	1
Total	34	88	28	65 60	0 44	4	1 75	5 47	47	88	61	63	643	658	282	548	490	103	Infantile	643	- [1	-	1	1	-1	-	1	4	-	Ť	1	- 1	+
Malas 17 98 99	17	90		00	90	90	20 20	60	80	1.0	, o	-	808	407	878	016	900	1	:	808							_						-	-

TABLE 78.—Continued.—Specified Causes of Death.

					Mo	nth	Months, 1888.	388							-	Years.									Ag	Ages in Periods of Years,—1888.	n F	eric	de	of Y	ear	1	1888	,			
Sex.	January.	February.	March.	April.	May.	June	July.	August	September	October.	November.	December.	18881	.7881	1886.	1882	1881		18881	Causes of Death.	Under 5.	5 to 10.	.df of 01	15 to 20.	.65 of 02	25 to 30.	.68 ot 08	82 to 40.	40 to 45.	45 to 50.	.66 to 55.	55 to 60.	.60 to 65.	65 to 70.	10 to 12.	75 to 80.	80 and over
Females	17	22	20	20	77	15	17	83	15	17	17	- 98	1 246	6 250		2112	228	189	8	Infantile	246	- 1	-1	1	-1	1	- 1	. 1	- 1	1	- 1	-1				1	- 1
Unknown.	1		1	1	i	- 1	+	1	1	- 1	1	1	-	-	-	19	4	=	1	,,	-	1	- 1	-1	1		- }	- 1	- 1	i		- 1	-1	1	1		1
Total	1	10	93	7	*	-	99	60	01	*	cđ	10	4	9	25	80	7	4	45	Inflammation	. 18	89	-	63	н	61	1	00	-	1	69	1	63	00		- 1	1
Males	1	67	-	-	4	1	- (63	=	61	-	63	-	18	18	18	98	22	24		=	7	1	1	-	-	- 1	-	-	1	- }	1	60	63		1	1
Females	-	03	0.9	00	1	н	00	-	н	60	н	00	64	21 2	52	21	81	19	13	,	7	63	1	63	-	1	-	63	-	г	6/3	1	1	-		-1	1
Total	- 1	- 1	- !	1	1	1	1	1	-	1	1	+		63	63	00	63	- 1	63	Influenza	- 03	-	-1	1	1				-	1	-	1	1	1	1	-1	- 1
Males						1	-	-	1	-	1	H	-	-	-	-	-	+	1	*	-	1	1	1	1	-		1	-	1	1	1	1	-	1	1	- ;
Females	- 1		-		i		-	- (-	1	1	1	-	-	-	03	1	1	61		-	- 1	[- {	1		1	4	- 1	1	- 1	- 1			1	i	1
Total	1	¢4	6.3	27	60	99	64	20	99	63	-	500		38	88	25	153	17	22	Insanity	1	- 1	- 1	- 1	1	60	¢.0	*	4	00	90	-	-	н	-	=	1
Males	1	1	-	-	69	64	-	1	1	-1	-	=	-	12	10	14	13	7	13		1	1	- }	1	1	-	- 1	63	00	63	-	1	-	3	-	+	1
Females	1	+	7	-	1	-	н	63	00	03	-	0.3		14 2	23	=	12	10	6	,,	1	- 1	- 1	1	1	6.3	63	01	н	H	63	-	1	F	i	i	1
Females	1	1	1	- 1	1	1	+	- 1	+	- 1	-	1	- !	1	,	-	- ;	- 1	1	Insomnia	1	1	1	1	- 1	-	1	1	1	- 1	1	1	1	- [-	1	1
Males	- 1		1	-	н	+	- 1	63	-	00	H	03		22	-	16 1	10	00	13	Intemperance	1	. :	-	- 1	-1	-	- 3	-	-	4	-	1	15	- 1	-	1	1
Females	1	-		1	- 1	1	4	1	+	-	1	7	1	-	-	4	63	H	00	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1	1	1	1	1	1	1	1	1	1	1	- 1	- 1	1	1	+	- (
Total	1	-	9	00	-	64	-	-	1	64	62	63	64	21 2	23	15 3	32	238	21	Jaundice	90	1	1	1	1	1	1	es.		H	-	00	1	F	1	63	;
Males	:	-	64	H	1	=	1	-	1	-	-	=	-	9	-	12	8	01	10		90	1	1	1	1	- 1	- 1	-	- 1	1	1	1	1	H	1	+	- 1
Females	- }	1	4	63	н	н	H	1	1	п	-	-		12 12	62	8	17	13	=		1	1		- 1	-	-	1	61	- 1	H	-	00	1	- 1	-	60	1
Males	1	-1	1	1	1	1	1	1		+	1	1	1	1	-	-	+	- 1	10	Joint Disease.	1	1	1	1	1	- 1	- 1	- 1	1	1	1	1	3	1	1	1	Y
Females	1	1	H	1	i	-	- 1	1	-	+	-	1	-		-	- 1	-	-	10		1	- ;	- 1	1	1	- 1	1	1	- 1	- 1	1	1	9	1	- 1	-	1
Total	15	10	20	13	23	14	83	-	12	17	16 8	81	1 210	0 205		214 198		179	187	Kidneys, Bright's	9	63	-	9	00	10	=	00	19	16	13	13	2	19	93	18	10
Malos	\$	-	-	1	-	-			-		7	-	0	1		200											Ī	7						11	1	-	Ť

Females		0	+	2	5				,									The same of the same of	_			-	-									
Total.	10	9	63	00	00	5 6	10	12	00	16	108	6	76	8	72	64	Kidney Disease	Disease	00	H	-1	63	93	*	63	*	53	10	10	17	14 14	13
Males	20	10	00	1-	9	8	00	=======================================	9	130	22	17	57	28	23	47	:	:	-	÷	1	90	23	+	-	00	-	00	00	15 1	11 13	3 13
Females	1	-	-	-	03	.:	67	+	21	03	19	8	19	22	15	17	:	:	24	-	+	-	-	- ;	-	1	1	01	27	01	65	1
Total	1 23	1	23	1	80	9	1	67	4	1	31	22	30	17	12	8	Kidneye	Kidneys, Inflam. of	60	- 1	10	00	Н	67	63	1	63	63	H	63	0.0	_
26	-	- 1	03	9	00	1	1	63	60	1	24	14	30	12	ю	9	:	:	93	1	03	1 22	1	H	-		63	0.1	H	01	63	-
Females	-1	- 1	1	-	1	23	1	- 1	-	- 1	-	7	10	10	7	00	:	•	1	ì	93	-	- }	-	-	1	1	1	1	1	4	-
Total	1	- {	- 1	-	-	-	ì	1	3	1	00	- 1	4	00	-	1	Laryngitis	tis	· i	+	1	6/1	1	1	1		- }	1	i	+	1	- 1
Males	- 1	j		H	=	1	1	1	1	-	69	1	23	00	1		:		4	i	1	63		1	1	1	-1	1	1	1	-	1
Females	1	- 1	- 1	1	1	-	- 1	-	- 5	1	1	1	21	1	-	1	:		t	+	1	1	1	1	1	- 1	- 1	i	-	-	- 1	1
Total	1	- }	0.3	1	-	93	- 1	i	1	1	9	67	9	-	10	11	Lightning	ng	- 1	-	1	- 1	H	1	-	1	1	- [т	=	-:	- 1
Males	1	- }	=	1	-	63	- }	1	1	1	*	61	4	9	7	7	:		- 1	1	1	1	+	-	į	1	į	1	-	+	- 1	-
Females	1	1	H	1	1	. 1	- 1	1	1	1	63	1	-03	-	93	4	:		-	1		1	à	1	-	1	1	-	- 1	1	1	- 1
Total	1	-	-	-	1	1	H	-	+	1	9	10	=	7	10	11	Liver, A	Liver, Abscess of	T	1	1	1	1	-	7	63	1	-1	-	1	,	1
Males	- 1	1	1	-	1	- !		- 1	H	- 1	00	63	9	40	00	60	:	:	*	-	1	1	1	1	- 1	-	1	1	- 1	- 1		1
Females	-		F	1	4	1	1	=	+	1	90	00	10	69	67	9	:	:	1	1	1	1	1	=	-	-	1	1	1	1	-1	1
Total	-	1	23	-	-	1 1	1	-	1	1	7	4	61	63	1	6/3	Liver, C	Liver, Cirrhosis of.	=	1	-	1	1	+	1	-	1	63	1	+	- 1	- 1
Males	- 1	1	F	-	1	-	- 1	-	1	1	*	90	63	-	1	93	:	:	- 1	1	1	1	İ	1	-	-	-	+	1	1	- 1	- 1
Females	-	- 3	-	;	1	. 1	1	1	+	1	03	-	1	+	1	1	:	:	н	1	1	-	1	1	-	1	1	-	1	+	1	-
Total	6 3	13	00	00	6	7 7	9	10	10	10	87	98	69	71	88	82	Liver, I	Liver, Disease of	11	H	1	00	4	10	9	*	10	-	00	-	-	9
Males	00	on	*	1	9	4	00	60	63	00	20	8	40	39	48	37	:	=	10	7	-		1	01	4	60	7	KG.	*	10	02	1
Females	**	10	4	-	00	63	20	00	600	7	37	88	28	32	37	8	:	:	9	1	1	10	*	00	61	-	00	63	4	c)	63	01
Total	-	1	60	-	00	1 4	60	41	-		33	=	*	16	18	10	Liver, E	Liver, Enlarge. of.	00	- 1	-	-	1	-	1 69	=	*	64	-	4	-	63
Males	-	1	i	-	63	93	23	-	-	:	13	4	*	7	-	64	:	:	1	1	1	7	1	-	1 3	-	63	-	-	-	-	- 1
Females	-	1	- 00	-	-	62	- 1	-	:	:	12	14	-	6	7	63	:	. :	03	1	-	-	1	+	- !	:	63	-	:	- 03	- 1	24
Total	-	203	-	+	-	.00	67	1	н	63	13	7	00	9	8	7	Liver, Inflam.	nflam. of	6/1		- 1	-	H	+	1	99	63	-	03	+	1	- 1
Males	1	-	-	1	1	1 3	1	- 1	1	;	00	6	99	09	*	00	:	:	03	- 1	- 1	1	-	1	1	-	+	1	01	+	- 1	- 1

TABLE 78. -Continued.—Specified Causes of Death.

	Ze X	Total	Males	Females	Total 1	Males	Females 1	Total 32 19 29	Males 14 12 16	Females 8 7 13	Males	Females	Females	Total 1 1	Males 1	Females 1	Total 1 8 8	Males 3 2	Females 1 1	Total 27 35 45	Males 14 17 21
M	April,		1		1	-	-	26 14	17 6	8	1	1	-	22	1 1	-	62	63	1	98 19	27 38
Months, 1888	'eung	- į	1	1	-	- 1	1	6	7	64	-1	1	- 1	1	H	1	1	-	1	99	25
bs,	.gin6	H	H	- 1	- {	- 1	1	16	10	9	- 1	1	1	1	1	1	60	67	-	21	=
1888	, tenguat,	1	1	-	-1			123	*	00	- !	1	1	٦	4	1	4	0.3	63	22	139
	September,	1	1	- 1	67	64	-	13	1	9	1	1	1	23	H	=	10	1	*	12	-
	October,	00	2/3	-	-	1	1	55	15	10	1	- 1	1	-1	1	1	4	69	63	19	00
	November,	н	H	- 1	1	H		53	10	00	1	1	1	н	1	1	- 1	1	-	12	9
	December,	H	-1	÷	01	1	63	90	17	15	1	1	1	-	F	1	H	1	H	120	10
	1888.	-	-	-	-	!	-	230	135	95	1	1	+	-	-		30	17	. 13	414	192
	.788I	6 4	1	63	9	4	2	0 229	5 145	8 84	1	1	+	11	3 4	7	0 21	15	3 6	1 285	2 163
Yea	.388I	н	1	1	14	7	7	218	127	91	-	1	-	90	8	63	57	88	19	129	99
Years.	,688t	-	П	1	1	-	1	165	88	77	1	1	-	7	10	6.3	69	31	29	88	19
	1881.		-	7	***	4	7	166	88	78	1	1	1	7	99	-	4	25	19	144	65
	1883.	-	63	_	5 12	9	_	5 185	8 108	88	1	-	1	00	2	83	•	7	62	258	5 113
	Causes of Death.	g Liver, Ulcerat'n of			Lungs, Abscess of			Lung Disease		" "	Lungs, Paralysis of		Malaria	Malformation	"		Marasmus			Measles	
	Under 5.	- 1	1	- 1	-1	-1	- 3	103	28	45	1	- 1	1	10		-	36	13	13	280	138
	.01 of c	- 1	-	-	1	1	1	31	10	9	1	1	1	0	10	10	63	23	-	0 45	24
	10 to 15.	- }		1	-	- 1	-	60	H	61	1	1	- 1	-	-	1	-	-	1	14	5
	15 to 20.	- 1	1	- !	1	1	-1	9	*	60	1	1	1	-	1	- 1	1	-1	1	22	90
A	.62 of 02	-	-	- 1	1	1	1	00	*	4	- 1	1	1	1	1	1	1)	1	15	13
Ages in Periods of	.25 to 30,	- 1	1	- 1	00	+	63	*	93	-	1	1	1	1	-	1	1	1	1	10	60
n Pe	30 to 35.	H		H	1	1	1	10	00	64	Ì	1	j		-	-1	-	1	ì	1	;
rio	82 to 40.		1	-	1	1	-	*	64	01	-	1	1	1	1		1	1	+	=======================================	4
dso	40 to 45.	1	1	1	+	+	1	9	*	63	1	1	3	1	- 1	-1	1	1	1	*	-
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sars	50 to 55.	-	1	+	+	+	-	6	9	00	+	÷	1	+	1	+	1	+	+	-	÷
Years,-1888.	55 to 60.	-	-	-1	- 1	1	+	20	8		+	+	-	-	- 1	1	4	1	-	-	-
88	60 to 65,	-	,	- ;	- 1	-	- :	12	10 1	63	- 1	-:	- 1	:	1	1	- :	1.	1	- 1	-
	65 to 70.	03	63	-:	-	=	-	20	=======================================	6	1	1	- ;	1	-	- 1	- !	1	-	-	
	75 to 80.	- 4	. :	-	60	1		7 8	63	20			- 1		- 1	- 1	-		1	1	- 1
- 1	80 and over.	-	- 1	- 1	_	- 1		-	6.3	23	-1	1	1	-1			-	1	i	- 1	_:

Unknown .	1	1	-	1	:	1	1	;	-	i	1	1	4	i	-	1	-	4	Measles	*	1	1	1	1	1	1	1	-	ì	1	1	i	1		÷
Males	i	1	- 1	1	- 1		- 1	- 1	-	1	1		1	}	1	i	ľ	23	Meningitis, Cerebral	- 1	1	4	1	1	1	+	1	1		1	-	i	1	1	-
Total.	00	H	03	-	61	63	60		_ i	- 1	- 1	-1	53	60	7	9	13	17	Meningitis, Cere- bro-spinal	94	1	90	1	64	-	1	60	_	- 1	**	- 1	i	+	1	+
Males	-	1	+	-	1	1	44	63	À	1	- 1	-1	10	00	03	6.1	9	=		-	1	1	i	H	1	+	-1	_	i	- 1	- 1	i	+	+	÷
Females	6.3	H	1	-	-	50	1	1	- 1	-	1	1	00	61	*	7		9	=	-	1	63	1	1	-	-	67	1	1	-	1	1	1	+	- (
Total	6/1	9	9	10	0	10	140	10		9	10	1	23	77	20	09	101	88	Meningitis, Spinal	5	00	1	01	60	61	F	-	1	64	i	1	i	+	i	+
Males	1	10	99	80	10	60	67	00	-	9	-	- (37	89	52	31	19	43	:	26	00	1	1	1	1	-	1	1	63	1	1	Ť	1	-	-
Females	6.1	-	00	63	20	2.7	63	03	1	1	-	1	8	39	89	65	40	40	:	16	NO.	1	1	1	н	-	-	1	- 1	- 1	1	i	-	- ;	
Total.	H	i	1	-	00	94		1	1	1	1	_1	-	4	9	10	10	10	Meningitis, Tu-	9	1	1	1	-	1	+	1	-1	1	- 1	1	i	1	1	3
Males	1	1	1	1	01	7	1	1	1	-	- 1	-1	60	T	60	=	6/4	10	3	63	1	1	1	-	- 1	- 1	1	i	-	1	1	Ť	+	+	
Females	-	-	1	-	-:	-	-	1	1	- 1	- 1	-1	+	00	90	00	00	-	*	•	1	1	i	1	1	1	1	-	- 1	1	- 1	1	1	1	
Unknown.	- 1	1	9	1	1	-1	- 1	- 1	-	1	1	- }	1	1	- (H	1	1	=	1	- 1	1	1	1	1	+	- 1	- 1	- !		-	i	1		- ;
Total	4	9	62	4	00	60	10	10	74	-	60	-1	5	20	88	31	16	20	Meningitis	92	63	10	1	1	1	-	-	-	-	- 1	1	i	+	-	1
Males	00	0.1	60	4	63	-	*	-	-24	-	-	- 1	82	6	15	17	11	6	:	18	61	1	H	H	- 1	-	н	-	-	-	1	i	+	- 1	1
Females	-	-	-	1	-		24	-	1	- 1	60	1	13	Ħ	13	14	n	10	=	00	1	+	1	1	1	1	1	i	1	1	1	i	i	-	*
Unknown.	1	1	1	- 3	- ;	- 1	Î	1	- 1	- 1	1		1	1	i	i	1	1		1	1	1	1	1	-	1	1	1	1	- (1		1	+	- 1
Females	- 1	1	7	- 1	5	4	- 1	1	1	- 1	1	- 1	1	۳	H	=	1	1	Menses	9	1	1	1	1	1	1	1	1	-	1	1	1	1	+	1
Females	- 1	1	1	1	- 1		-	Ý	- 1	1	1	1	H	-	H		63	1	Milk Leg (Phleg- \ Dolens)	- }	-1	1	H	1	1	1	1	- 1			1		1	1	-
Females	1	-	-	- 1	1	-	- 6	- 1	- !	- 1	- 1	i	1	H		-	-1	63	Mortification	- (1	1	1	1	1	1	1	1	- 1	- 5	1		i	+	+
Total	1	1	- 1	-	-	-	-	-	_	54	50	- 1	7	60	9	Ç4	7	0	Mouth Disease	9	1	1	1	F	-	+	1	- 1	- 1	- 1	- 1	1	1	1	-
Males	- {	1	2	4	1	- 1	-	- 1	_	-	1	1	0.1	23	*	010	03	63	* **	63	1	1	1	1	1	1	-	- !	- ;	- 1	1	1	1	+	-
Females	1	1	1	-	-	-	-	-	-	7	1	1	10	-	63	9	4	93	:	**	1	1	-	-	1	+	- !	1	1	1		-	1	-	+
Males	1	1	H	- 1	-	1	- 1	1	- 1	7	_	1	00	1	F	1	23	63	Mumps	67	1	1	1	H	1	-1	1	- !		- 1	1		1		+
Females	- 1	1	1	- 1	- 7	1	- 1	- 1	- 1	1	- 1	1	1	41	93	i	1	1	***	- 1	- 1	1	1	1	1	-	- 1	-	- 1	- 3		- 1	1	- 1	-
Total	-	1	1	01	20	90	- 1	-1	_ 1	34	00	60	#	53	30	28	24	15	Murder	1	1	1	03	-	H	00	1		63	-	-		1	- i	1
Males	1	1		09	-00	02	1	1	-	-	99	-	13	22	27	20	17	14	3	1	-1	н	67	-	-	00	1	- 1	621	-	-	- 1	1	-	1
Females	-	1	1	+	-7	1	1	1	-	- i		1	7	7	30	00	1	1	*	- 1	- 1	1	-	1	1	1	1	-	- 1	- 1	- 1	1	1	-:	1
Malos				-				_	*						3	4	*	-	Noorogie							-		*	_					-	-

TABLE 78.—Continued.—Specified Causes of Death.

					Mc	nth	Months, 1888.	888								Ye	Years.				_				A	ges	E.	Per	Ages in Periods of Years,—1888.	of	Yes	irs,	180	œ			
Sex.	January.	February.	March.	April.	May.	3me,	July.	August.	September,	October.	November,	December.	Unknown;	.888I	'L881	1886,	1885.	.1881	1888.	Causes of Death.	Under 5.	5 to 10.	10 to 15.	15 to 20.	20 to 25.	.08 of 68	.68 ot 08	85 to 40.	,64 of 04	45 to 50.	.dd of 0d	.00 ot 66	60 to 65.	.07 ot 58	.df of 07	75 to 80.	, revo ban 08
Females						1		-	1	1	1	1	1	1	-		-	-	93	Necrosis	- 1	1		1	-1	1	1	- 1	1	- 1		- 1	-1		1	- 1	1
Malos		Ti								-		- 1	1	1			-	- 1		Neglect	- 1	- 1	-	1	- 1	1	1	1	1	1	i	-1	1	1	1	1	1
Females								-	-5			:	1	-			7	-	1		_	-	- [- 1	- 1	1	1	1	1		1	-	1	-	1	1	1
Males				- 1		- 1	1	- 1	- 1		1	- 1	1	- 1		_	03	77		2 Nerve Disease	- 1	1	1	1	1	1	1	1	- 1	1	i	- 1	1	1	- 1	1	1
Females						1	1	1	1	-	1	1	1	6.3	00	-	20	=		10 " " 01	-	-	1	1	-	1	1	1	i	1	1	-	i	1	-	1	1
Total	10	03	00	-	*	67	10	63	61	00	1	-	H	32	20	63	1	-	- !	. Nervous Prostrat'n	- [-	-	1	-	-	_	22	64	62	4	60	63	**	00	6.1	-
Мајов	00		62	-	67		00	H	-	63	- 1	:	-	16	10			- 1			į	-	-	-	-	-	1	-	1	63	24	_	1	6/1	62	7	-
Females		00			63	63	0.1	-	-	-		-	;	16	10	-		- 1	- 1		1	- 1		1	-	1	-	-	63	1	67	63	63	63	-	-	1
Total				13	03	-	-			- 1	-	93	- 1	14	12	14	7	17		10 Neuralgia.	1				-	-	_	1	-	60	00	_	00	1	- 1		-1
Males	60		63		H				-	-	-	67	- ;	00	23	9	99	-	-		-1	1	- 1	-	-	-	-	- 1	1	_	**	_	1	ď	1		i
Formulas			1	11	67	0	-		15			-		9	10	00	7			8	- 1	- 1	i	-1	1	-	- 1	- 1	-	_	- 1	1	00	-	1	1	-
Total	105		96 118 121	121	8	7	26	79	102	88	102	108	00	1174	917	865	773	795	5 726	6 Old Age	- 1	- 1	1	1	- ;	- 1	- 1	- 1	1		- 1	-	16	95	175	263	999
Malaa	26		20	19	200	75	4	37	92	20	9	47	63	286	468	427	4	403	3 365			- 1		-	1	1		1	1	1	- 1		9	15	75	129	354
Females					46	40	34	3	46	43	62	28		288	449	438	386	392	2 361		- 1	1		1	1	4	- 1	1	- 1	- 1	1	-	10	31	100 134	184	306
Unknown		- 1								1	- 1	1	1	- 1	-	- 1	80	-	_	"	1	1	- !	1	1	-	1	1	1	i	1	1	÷	1	- 1	1	1
Males		- 1			- 1	- 1	- 1	1	- 1	-	- 1		:	-	-					Opium Eating	1	1	- 1		4	1	- 1	1	- 1	1	1		1	1	1	-	1
Females										-	-	- 1	-	i	1	-		-1	- 1		1	- 1	1	1	1	1	i	1	1	1	1	1	1	1	1	-1	i.
Females	-	-	-	- 1	-	. 1	1	-	1	-	63	- 1	- 1	00	7	64	12	12	63	5 Ovarian Tumor	_ [- 1	1	63	-	1	-	1	-	0.3	-	1	- !	1.	1		1
Total	- 1	- 1	- 1	-	1	-		93	- 1	1	1	1	- 1	4	*	-	6	110	-	7 Overdose of Med- }	i	1	1	1	1	1	1	63	1	1	1	_	1	-	1	1	i.
Males	- 1	1	1	-	-	1	1	03	- 1	- 1	1	1	1	90	80	03	6		0		1	1	1	1	1	1	1	-	1	1	1	_	1	-	1	1	1
Donnelle				Ī				ľ																				_									

Males	1	1	1	1	1	1	1	+	18	1	1	1	=	-	1	Ť	1	1	Over-work	1	1	1	1	7	1	4	1	1	1	1	1	+	1	3	÷	1
Females	1	- }	1	-	1	-1	-	1	- 1	- 1	1	i	1	-	1	1	1	- 1		i	1	1	- 1	1	-;	1	1	1	- 1	1	1	1	1	- 1	+	7
Males	1	- 1	-	1	1	1	+			-	1	i	-	1	i	1	1	-	Pancreas Disease	- 1	- 1	1	-1	1	1	1	1	1	1	1	1	1	-	1	-	+
Females	- 1	- 1	1	1	i	1	-1	- 1	1	1	1	i	1	1	-	i	1	- [:	- 1	- 1	- 1	- }	-1	- 1	1.	1	- 1	-	-1	-	1	1	1		+
Males	1	1	1	1	1	1	1	;	- 1	1	1	i	1	14	1	1	1	-1	Paralysis, General	1	1	1	-	1	-1		1	- 1	1	- 1	Î	1	1	1	1	1
Females	- 1	1	1	1	1	1	1	-		- 1	- 1	- (-	-	i	-	1	- 1	:	- 1	1	+	1	- 1	1	1	-	1	1	1	- 1	-	-	1	-	4
Total.	80	7	88	22	4	4	40	46	42	2 40	9	69	252	450	485	00	397	345	Paralysis	13	93	-	9	03	9	12	15	19	26	25	40	20	73	5	88	60 10
Males	19	22	15	119	27	25	19 2	53	25 19	9 22	88	-	290	251	290	202	211	208	*	9	-	-	- [1	60	10	6	12	12	13	17	23	40	53	15	28
Females	=	119	22	88	81	20 2	21 2	22	63	23 18	24	63	262	199	195	961	186	139	*	02	-	1	9	63	00	10	9	-	17	18	83	22	83	4	55	34
Unknown	1	1	1	1	1	1	+	- 1	- 1	- 1	-	1	-	1	1	40	1	i	=	1	1	1	1	1	1	1	1	1	- 1	1	i	1	- 1	1	+	+
Total	00	7	-	+	00	00	-	10	-	00	9	1	9	32	22	22	27	17	Peritonitis	62	-	-	1	4	10	4	93	02	03	1	00	-	63	60	-	
Males	-	6	- 1	-	н	-	61	4	-	63	64	1	21	13	13	10	10	10	=	_	1	*	1	-	60	1	64	1	-	1	63		н	63	+	1
Females.	01	63	1	00	61	44	10		1	23	4	1	22	22	10	12	17	7	=	63	-	02	1	62	10	4	-	63	-	1	1	-	=	1	+	+
Females	1	1	1	1	1	1	1	1	1	1	-	1	H	1	1	1	1	H	Pharyngitis	1	1	- 1	-	1	1	1	1	1	4	1	1	1	+	1	+	+
Males	1	- 1	1	1	- 1	1		-	- 1	1	-	- 1	=	1	+	1	1G	93	Piles	1	1	1	1	1	1	- 1	1	1	1	i		- 1	+	1	+	+
Females	- !	1	- 1	1	-	1	+	- ;	1		1	-;	1	1	-	1	-	00	:	1	1	1	- 1	1	- 1	-	-	1	1	Í	1	1	-	+	- 1	+
Total	-	10	02	4	9	10	1	- 01	4	92	10	-1	46	23	20	16	18	20	Plearisy	4	63	4	63	+	-	-	+	61	*	00	1	60	02	2	-	~
Males	-	4	1	-	63	4	-		23	_	-01	1	83	16	=	=	10	00	;	50	60	60	-	93	-		63	1	00	1	1	н	-	05	+	-
Females	ŧ	1	03	99	+	-	- 6	61	63	-	60	1	83	6	6	10	00	12	**	-	1	44	-	-	1	1	69	63	-	00	1	-	63	+	-	64
Total.	- }	-	*	-	1	1	- 1	-	-	-	00	4	10	03	10	*	6	*	Pleuro-neumonia	i	- !	-	- !	7	1	1	1	-	1	1	era	-	63	-	7	-
Males	3	-	1	-	1	- 1	+	-1	1	1	61	- (10	1	00	-	9	67	:	i	1	-		1	1	1	1	Ì	1	1	-	- 1	-	+	1	-
Females	1	1	4	1	1	1	1	1	1	1	7	;	10	1	04	93	93	03	; ;	į	1	- 1	1	1		Ť	1	=	1	N	e)i	+		-	-	+
Total.	12	6	23	13	10	9	-	2		00	00	1	101	98	67	99	19	8	Pneumonia, Typhoid	=	00	9	7	80	*	00		9	00	7	02	10	6	00	9	- 1
Males	7	9	-	-	1-	00	10	01	10	-	9	;	66	ž	39	93	4	8	:	60	1	*	9	00	99	63	9	*	9	9	-	1	4	61	63	+
Females	10	60	10	9	99	00	00	4	9	7	63	1	2	36	88	18	23	25	:	80	**	67	1	10	-	1	-	67	63	-	63	00	10	н	-	+
Total	98	153	96 153 181 143 128	143	88	74	36 3	37 68	8 68	8 74	131	=	180	188	788	133	767	737	Pneumonia	442	35	23	34	98	32	88	8	39	88	4	64	65	99	69	52	35 18
Males	75	82	87 95 78	18	75	46 1	15 1	18 33	33	07	82	-1	199	522	811	130	133	11	*	257	22	=	15	98	13	8	22	24	25	21	22	31	36	88	31	14 9
Females 42 66 86 65	42	99	88	65	55	88	21 1	19 35	5 37	7 34	49	-	236	362	335	312	333	326	:	185	83	7	13	20	83	17	35	12	13	20	17	34	30	31	21 2	21 9

TABLE 78.—Continued.—Specified Causes of Death.

					Mon	nthe	Months, 1888.	88							Ye	Years.		П						AB	es i	n P	Ages in Periods of Years,—1888.	ds o	f Y	ears	Ţ	888	1.1			
Sex.	January.	February.	March,	'Ilriga	May.	June,	July.	August,	September, October,	November,	December.	Гикпомп,	'888T	.788I	1881	1882	.1881	. 1888I	Causes of Death.	Under 5.	5 to 10.	10 to 15.	15 to 20.	20 to 25.	.08 of 62	30 to 32.	82 to 40.	40 to 45.	.06 of 64	20 to 22.	.08 of 55	60 to 65.	70 to 75.	75 to 80.	,19vo bns 08	Unknown,
Unknown.	-	1		1	1	+	-	1	- }	- ;	- 1	3	1			-	7	1	Pneumonia			- }	-					1	- 1	1-	1	-	- 1	- 1	1	-
Total.	-	-	H	99	63	1	03	23	-	63	*	53	21	51	18	38	16	33	Poison	7	-	63	1	H	-1	1	н	63	00	-1	00	-	- 1	- 1	-1	4.
Males	-1	-	-	00	1	-1	60	-	1	-	63	-	12	19	10	19	13	23	,, 9	4	1	1	1	-	-	1	-	-	63	1	01	-	- 7	- 1	- 1	- 1
Females	-	1	1	1	63	1	1	-	-	-	93	-	6	123	00	7	32	00	,, 8	00	-	61	1	1	-	1	1	н	H	1	-	÷		-1	- :	
Males	1	1	1	1	- 1	-	- 1	1	- 1	-1	-	1	1	-	-	- 1		67	2 Prostate, Disease of	1	-	:	:	- ;	1		1	1	1	1	-	1	-			-
Females	- (1	1	=		1	-	-1	-	1	-	_	63	-	-		4 Puerperal Convul- }	- 1	- 1	-1	- :	1	н	-1		-	- 1	÷	- 1	- 1	- 1	- 1	- ;	- 1
Females	23	120	10	-	10	01	00	00	00	00	61	1 2	20	29	25	37	82	-	48 Puerperal Fever	- 1	1	- 1	00	6	17	10	*	00	1	=	1	1	1	- 1	- 1	60
Total	1	-	63	-	;	н	-	-	1	01	63	00	15	9	17	6	00		12 Quinsy	61	-	7/3	63	-	-	- 1	-	- 1	1	1	=	1		- 1	- 1	2
Males	1	1	60	1	1	3	1	1	1	-	-	1	9	9	10	-	-	20	6	1	. 1	*	1	-		1	-	1	- 1	- 4	- 1	1	- ;	-	- ;	- 1
Females	1	-	- 1	-	1	н	-	=	-	н	-	1	6	03	7	63		00		-	-	-	62		-	1	H	- 1	1	- :	=	:	-	- ;	- 1	
Males	- 1	1	1	1	1	1	-	- 1	1	+	-	- 1	1	1	01	-	-	-	1 Rachitis	1	1	1	-	-1	- 1	Ī	1	- 1	4	- 1	-	-	- ;	- :	-1	- !
Females	i	1	1	1	1	1	+	1	1	- 1	1	-	1	1	I	-	1	-		н	1	1	1	1	1	1	1	-	1	1	+	1	- ;	- 1	- ;	-:
Total	00	7	10	10	00	10	10	=	12	15	17	13	113	8	72	76	78	3 109	9 Railroad Accident	-	93	00	6	18	17	00	10	77	10	-10	63	-	*	-		9
Males	9	6	6	10	60	10	10	=	12	14	5	12	106	88	67	89	19	100	0	1	00	93	-	18	16	00	10	17	10	NO.	09	1	*	10		
Females	61	20	-	1	-	-	+	1	- 1	-	1	-	7	00	10	00		9	" " 6	-	1	-	63	1	-	i	1		1	- ;	-	- 1	-	01	- ;	- 1
Males	1	1	1	1	1	1	1	1	+	1	1	1	1		7	1	1	1	Rheumatism of Brain.	1	- 1	4	1	1	1		1	1	-	- 1	1	1	- 1	- 1	-7	-
Total	00	9	9	63	63	00	*	93	-	63	69	10	39	88	31	25	150		23 Rheumatism of Heart.	64		*	00	1	61	63	1	-	9	00	1	00	-		10	-
Males	63	н	4	-	03	64	03	03	-	.00	03	00	22	38	19	22	22		91	23	1	4	63	1	- 1	-	- 1	-	00	-	-:	0.3	- 1	*	60	-
Females	-	10	67	-	-1	-	63	-	1	1	1	63	15	6	12	12		6	2	1	1	1	1	-	61	-	1	1	93	63	- ;	-1	1	23	03	-
Total	1	1	90	H	Т	64	03	63	-	=	1	9	15	21	22	14	18		29 Rheumatism, Inflam.	-	*	23		1	64	67	H	- 1	- 1	1	- 1	+	- 1	3	1	
Males	1		03	-	- (-		-	-	-		- 00	00	6.	_	6	=	17	" " "	_	_	-	1	1	-	-	-								_	-

Females	1	1	=	F	-	1 2	-	1	1	1	T.	-	7	12	13	10	7	12 Rheumatism, Inflam.	Jam.	ï	00	=	1	-	1 1	1	1	1	1	1	=	Ť	÷	+	+	
Total	1	H	=	1	1	- 1	1	1	1	1	1	-1	00	4	10	00	00	6 Rheumatism, Sc	Sciatic	+	1	+	1	1	1	- 1	1	1	1	1	1	- 1	637	i	+	
Males	1	1	=	1	1	1	1	-	1	1			63	63	4	-	_	20	:	1	1	1	1	1	1	1	1	1	-1	1	1	- ;	24	1	÷	_
Females	1	=	+	-	1	- 1	1	-	+	-	1	1	1	67	-	00	63	:	:	1	1	+	1	1	1		1	1	H	1	1	1	+	+	+	
Total	1	9	10	13	6	9	*	93	6	9	=	#	82	88	90	52 72	43	Rheumatism		93	-	93	H	7	1	9	2	7	80	00	12	0	3.	9	69	
Маве	H	00	10	=	-	4	4	1	*	4	9	-	53	99	63	29 38	22	:	-	-	1	H	-	*	1	4	10	*	1	9	6	-	-#	00	63	
Females:	9	90	-1	63	63	-	1	63	70	23	10	-	22	88	11 23	23 34	21	:		-	1	67	+	89	1	63	1	83	65	63	65	01	10	02	+	
Total	67	63	H	#	63	-	63	1	63	1	00	1	1 6	12	7	9 12		8 Rupt're of Blood Vessel	Vessel	00	1	-	-	-	1	-	1	1	- 1	00	63	22	-	=	67	_
Males	-	1	-	1	-	-	-	-1	63	:	64	-	01	7	00	9	9		:	-	1	- 1	+	-	1	7	1	1	1	1	-	2	1	-	-	
Females	1	63	4	H	63	-1	1	- 1	1	1	-	-	6	00	9	89	9	:	:	63	1	1	+	-	i	-	1	1	- 1	60	-	1	-	1	-	
Males	- 1	-	+	- 1	1	- 1	- !	1	1	1	1	-	-	-	-!	- !	1	Scald Head		1	1	1	1	1	1	1	- {	3	-1	-	1	1	1	+	- 1	
Total	-	1	00	-	- 1	4	60	4	1	1	4		20 2	22	22	32 21	1 20	Scalding		13	60	- 1	-	-	-	-	i	1	-	- 1	1	1	- 1	+	1	
Males	1	1	00	- 1	1	20	00	00		- 1	00	-	15 1	13	9	23 14	15			10	+	- 1	-	- [-	-	1	- [-	1	1	1	+	1	1	
Females	-	1	1	-	1	7	- 1	-	1	-	-	,	10	6	120	6	2		-	60	67	1	-	- [1	- 1	1	1	ı i	1	1	+	+	1	+	
Total	22	21	88	35 20	83	25	20	30	26	30	83	62	323 31	818 81	819 245	5 326	8 673	Scarlet Fever		202	18	19	6	-	63	63	1	Ţ	1	1		1	1	+	=	
Males	10	10	16	25 1	4 12	2 11	13	119	12	15	13	12	170 15	152 16	191	8 148	8 338		-	116	88	00	4	-	-	1	1	- }	- 1	1	1	1	-	1	-	-
Females	15	Ħ	17	0	6 13	8 14	7	7	14	15	8	#	153 16	11 991	158 109	9 178	8 335	:		88	48	=	10	-	61	64	1	1	- 1	1	1	1	1	-	+	
Total	00	00	=	H	91	2	*	62	1	:	+	1	21 2	25	24 2	28 40	0 24	Scrofula	-	17	1	+	1	-		-	1	- }	- 1	- 1	Ť	1	1	=	÷	
Males	67	93	=	3	-	63	62	-	-	- {	-	1	1 1	12	13	10 25	5 12	61	-	10	1	+	1	-	1	-	-	1	-1	1	1	1	1	-	-	
Females	-	1	1	-	_	-	03	-	1	1		- 1	7	10	11	13 15	5 12	63		-	1	1	+	1	1	1	1	1	1	1	1	1	-	+	+	
Males	1	1	+	- 1	- 1	- 1	- 1	1	1	1	1	1	- 1	- 1	3	1	7	Bea Sickness		1	1	1	1	1	1	1	1	- 1	1	1	1	1	1	1	1	
Total	14	6	10	16 16	50	6	118	14	7	15	19	11	157 12	21 12	125 12	129 94	4 113	Septicaemia	Ī	16	10	2	13 13	3 10	6	8	10	9	55	12	00	6	00	0	70	
Malee	7	*	00	00	00	4	6	9	61	6	1	-	77 5	28	9 89	68 43	8 51	;	-	6	*	-	65	-	63	9	67	10	9	12	63	7	00	03	62	
Females	7	10	-	80	00	63	6	00	10	9	12	1	9 08	88	87 6	1 51	1 62	63	-	1-	-	2	10 12		80	00	00	1	7	93	10	esi.	4	es.	50	
Total	-	H	1	61	1	6/3	1	1	63	1	1	-	6	-	00	80	D9	Skin Disease		4	-	+	- 1	E .	-	1	1	1	1	1	1	10	-	+	-	
Males	-	+	1	67	1	- 1	1	-	63	1		1	-	H	10	4	-	:		00	-	1	1	1	1	1	1	1	1	1	1	- 1	-	+	-	
Females	1	1	1	1	-	23	-	- 1	- 1	1	1		03	00	op.	4	10			-	+	+	1	-	-	- [1	1	į.	î	i	1	+	1	+	
Malee		-	-;	- 1	_	-	-		j	1	00	- 1	03	-	10	_	89	5 Small-pox	_	-		-	1		2	- 1						1	=	-	-	

TABLE 78.—Continued.—Specified Causes of Death.

					M	urt	Months, 1888.	888	2						-	Years.									Age	s in	Ages in Periods of Years,—1888.	riod	s of	Ye	ars,	18	88				
Sex.	January.	February.	March.	April.	May.	'eme'	July.	'tanguy	September,	October,	November,	December,	1888L	1887.		1882	1	1881	18881	Causes of Death.	Under 5.	5 to 10.	.61 of 01	15 to 20.	.62 of 02	25 to 30.	.68 of 08	85 to 40.	40 to 45.	45 to 50.	.66 to 55.	.00 of 66	.60 of 05	65 to 70.	70 to 75.	00 04 35	75 to 80.
Females	_ [1	1		i	-1	;	1	- 1	-	- 1	-	- 1	1	-	50	1	1	Small-pox	-	1	1	1	- 1	1	1	1 1	- 1		1	1	1		-	. 3	-
Males		1	- 1	-1	1	- 1	1	1	1	1	4	+	-	- 1	-	1	63	1	- 1	Snake Bite	-	1	1	- 1	1	1	1	1	- ;	1	1	1		1	-		-
Females	1	1	-	-1	- 1	- 1	i	-	-	- i	i	-	1	1	-	-	63		- 1			1	:	1	1	1	1	1	-	- 1	1	1	1	1	1	1	-
Total	- {	1	1	1	1	1	1	1	1	н	=	-	- 0	00	-	4	63	H	-	Spina Bifida	67	-	1	- 1	1	1	1	1	- 1	1	-	- :	1	i	T	1	
Males	1	- 1	-	i	1	1	i	1	1	1	1	H	1	-	- (1	+	1	-	* "	-	1	1		1	-1	- 1	1	- 1		- 1			i	Ť	-	
Females	1	į	- 1	1	-	1	Í	1	1	H	-	1	-	67	-	00	63	-	1		-	1	- (- }	j	1	- }	1	1		1	1	1	-	1	1	
Total		12	10	123	14	13	9	10	6	9	2	6	=	113	89 1	139	1 18	114	108	Spine Disease	62	12	7	6	4	60	ro.	63	1	-	60	-	-	00	1	63	
Males	90	9	10	7	00	-	- 4	10	00	4	0.1	+	-	29	21	65	2	28	29	" "	- 32	9	7	9	-	-	-	п	- 1	1	- 1	-	- (7	- 1	6.3	
Females	6/3	9	10	10	9	9	9	10	-	07	10	10		75	88	19	42	28	49	n n	30	9	1	00	00	-	4	-	1	- 1	93	- 1	-	63	-	1	
Males	- 1	- 1	-	1	1	1	1	1	1	1	1	1	- 1	- 1	- 1		+	1	1	Spine, Inflam. of	-	- 1	- }	- 1	- 1	- 1	1	i	- 1	- 1	1	- !	1	1	- 1	- :	
Females_	- 1	ij		i	1	1	i	i	1	i	1	1	-	1	23	6.1	- 1	1	1	, ,	1	- 1	- 1	- }	1	- 1	1	1	-	1	1	- 1	- 1	1	1		
Males	- 1	-1	1		1	1	1	- 1	1	1		- ;	- 1		00	1	63	1	1	Spine, Injury of	-	1	- 1	-1	- ;	- 1	- 1	- 1	- 1		1	1	- 1	1	- ;	-	
Males	- 1	- 1	1	1	1	1	i	1	1	i	1	1	-	-	63	-	90	1	1	Spine, Paralysis of.	-	- 1	1	. :	- 1	- 1	1	1	1	:	-	1	1	1	- ;	- 1	
Females	-	н	1	1	1	Í	Ť	i	i	1	1	-	1	-	63	+	1	1	1		1	1	1	1	1	-1		1	- 1	-	1		1	1	1	-	
Total	- 1	63	- 1	1	-	-	1	1	1	÷	1	1	-	*	-	90	-	4	-	Spleen, Disease of	43	1	1	1	-	1	1	1	-	-	1	1	1	1	1	1	
Males	i	01	1	- 1	-	T	1	-1	1	1	1	1	-1.	00	H	10	1	64	-		62	1	;	- ;	. !	1	1	1	- 1	-	1	1	1	i	-	;	
Females	- 1	- 1		1	1	H	1	- 1	- 1	1	1	1	-	-	- 1	00	-	61	1		-	1	1	1	-	:	1	-	1		-	- 1	:	:	- 1	1	
Males.	1	- 1	- 1	1	1	-	1	1	4	1	1	-1	4	1	1	H	-	1	-	Starvation	-	1	1	1	1	1	:	- 1	1		1	1	-	1	i	1	
Females	1	1	1		1	- 3	i	1	=	1	1	1	-	-	H	1	1	1	-		-	1	1	1	1	1	1	-	1	-	1	- 1		1	1	1	
Total	108		10	98 104 100 120	-	112 121	121	112	99	108	119 157	_	5 1358		897 9	900 1008		616	884	Still-born	1358	1	-1	- 1	4	1	1	1	- 5	1	1	1	- 1	1	-	1	
Males	100	ig ig	63	55	76	29	77	20	87	20	101 29		98	809	508	500	606	241	518		000		. 1												T		

Females	50 35										-						Oct Della Dolla .		100	1	-	-	-	-	1	:	:	1	:		-	:
Unknown.	00	60	63	-	:		7	- 1	1	1 2	15	35	43	30	72	48	:		15	1	1	i	-		-	1	İ	1	1	-	1	- (
Total.	1	-	99	4	-	72	6	*	67	9	4	65	31	23	28	26	Stomach Disease	isease	16	1	63	-	-	1	10	-	21	63	00	70	04	-
Males	- 1	-	-	-	1	60	7	4	-	00	27	16	16	15	17	16	3	:	=======================================	1	1	1	-	- 1	60	- 1	63	-	-	1	63	-
Females	1	7	6/3	00	-	63	63	-	1	00	17	16	15	14	6	6	:	=	10	1	63	F	-	1	61	-	1	-	63	69	1	- 1
Unknown.	1	1	1	1	1	1	1	1	1	-	-	1	1	1	1	1	:	:	1	- 1	1	1	1	- 1	- 1	1	1	+	1	1	- {	1
Total	н	63	4	10	6.3	6	1	23	4	4 1	43	555	37	#	39	42	Stomach, Inflam. of	nflam. of	7	94	63	90	63	00	-	63	-	61	-	7 8	1	
Males	1	64	-	-	1.1	2	1	93	4	23	83	11	19	18	14	8	:	:	67	1	1	- 1	-	60	-	63	-	-	10	63	1	
Females	-	63	90	*	03	63	1	i	1	64	18	21	18	38	23	22	:	:	10	1	63	99	-	-	1	1	1	-	63	_	- ;	1
Total	1	64	63	63	- 1	1	1	-1	00	1	11	7	6	63	9	80	Stomach, Neuralgia of	uralgia of	-	- 1	H	1	-	- 1	03	6/1	1	-	+	-	-	-
Males	1	-	- 1	60	1	- 1	3	- 1	1	- 1	20	10	23	1		-1	:	:	-	1	1	1	1	- 1	- 1	-	1	-	1		1	-
Females	- :	-	63	1	1	1	-	-{	00	1	90	63	7	93	4	93	3	:	1	1	-	1	1	-	69	63	i	1	=	- 1	-	1
Total	-	1	1	i	-	- 1	1	1	1	-	4	4	1	63	1	1	Stomach, Paralysis of.	ralysis of.	1	-1	i	1	1	-	-1	1	H	+	1	-	-	-
Males	-	- 1	1	- 1	-	- 1	1 5	1	7	-	99	-	-	63	1	1	:	:	1	1	1	1	1	- 1	1	- 1	=	1	1	-	-	
Females	1	- 1	-	1	1	- [1		1	1	7	00	-	- 1	- 1	1	;	:	-	1	-	1	1	1	- 1	- 1	1	1	- 1	-	- 1	
Males	1	- 1	1	1	1	1	- 1	- 1	1	1	1	63	1	1	-	-	Stomach, Rupture of	Rupture of	-	1	1	4	1	- 1	1		1	1	1	- !	- 1	1
Females	1	1	I	1	- 1	1	- 1	1	1	- 1		H	1	1	1	- 1	:	:	-	- !	1	1	1	- 1	-1	1	1	1	1	- 1	- 1	1
Total	1	62	1	10	- 1	-	67	60	- 1	623	21	18	6	6	10	6	Stomach, Ulceration of	reration of	63	1	1	+	:	H	2 1	-	6.1	-	60	-	_	
Males	1	1	-	4	1	93	1	00	1	69	14	11	20	9	10	93	:	:	64	1	1	1	-1	-	1	-	¢1	66	63	-	-	1
Females	- 1	-	1	=	1	63	63	1	1	1	7	7	9	00	10	7	.	:	- 1	- 1	1	4	1	-1	2 1	1	1	-	-	62	- 1	
Males	- 1	1	1	+	1	- 1	- 1	i	1	1	- 1	-	-	i	-	1	Stone in Bladder	adder	1	- 1	1	1	4	1	- 1	i		1	1	1		
Total	63	6/3	į.	93	-	-	-	1	00	-	13	00	10	7	Ħ	9	Strangulation	ion	11	- 1	i	1	- 1	-	-1	- 1	F	+	+	1	П	1
Males	=	_	- 1	-	- 1	1	-	- 1	-	=	9	4	9	4	9	60	:	İ	20	1	1	1	1	-	1	1	1	1	1	1	1	1
Females	1	-	i	63	1	-	1	1	69	1	7	-	4	00	70	00	:		9	- 1	x I	1	1	1	1	j	H	+	1	-		1
Males	i	1	1	1	1	-	1	1	1	1	1	63	4	1	10	1	Stricture of	Intestines	-	1	1	1	1	1	.1	1	1	1	1	-	1	1
Females	-	- 1	1	1	1	1	- 1	1	1	- 1	- 1	-	-	1	i	1	:	:	- 1	_1	1	1	- 1	1	1		1	1	1	-	1	.1
Males	1	1	1	1	- 1	1	- 1	1	1	1	-1	1	-	1	1	1	Strict. Œsophagus	- sugardo	1	1	1	1	7	1	-1	1	1	+	1	1	1	-1
Mala					_												:						-	_			Ī		_	_		

TABLE 78.—Continued.—Specified Causes of Death.

					Mo	nth	Months, 1888.	88							Ye	Years.				-				AB	e8 i	n P	erio	ds o	Ages in Periods of Years,—1888.	818	Ĩ	8				
Sex.	January.	February.	March,	April.	May,	.ount.	July.	'asnany	September,	October, November,	December,	Unknown,	.888I	.788T	1886.	1882	1881	.888I	Causes of Death.	Under 5.	5 to 10.	10 to 15.	15 to 20.	20 to 25.	25 to 30.	30 to 32.	.01 of dB	40 to 45.	45 to 50.	.66 to 55.	55 to 60.	60 to 65.	.07 ot 07 ot 70.	75 to 80.	.asvo band over.	Unknown.
Males				1	1	-	1	1	-	1		- 1			10	63	23	10	3 Stricture		1				1		• 4	1	1	1	1	1	1	;		4
Total.	63	4	- 3	93	-1	00	-	-	-	-	H	00	19	13	15	13	17		6 Suffocation	#		69	- 1	1		1	- 1		Ħ	1	-1	=	- 1	- 1		20
Males	63	4	1	23	- 1	23	;	-	H	+	,	63	7	_	-	9	12			1	-	-	1	-	- 1	1	4	1	-	1	- 1	-	- 1	- 1		03
Females	- 1	1	-	- 1	1	-	H	4	1.	-	-	-		10	-	-	62			1	*	-	- 1	1	1	1	- (1	i	-	1	- 1	1	- ;	- 1	- 1
Total.	9	4	00	10	13	=	6	-	6	п	00	62	101	105	88	16	104	120	91 Suicide	1	1	1	. 6	4	==	00	10	7	30		-	2	10		00	4
Males	10	*	00	7	=	10	20	7	*	8	7	8	85	75	9 9	18	2		69	1	1	- 1	00	63	6	9	7	9	17	7	9	4	10	* 00	63	63
Females	1	1	1	93	63	-	4	1	10	63	-	+	19	9 30	18	3 12	20		22	1	- 1	- 1	.00	23	63	63	93	-	03	-	-	H	1	-		- 1
Unknown	:	1	- 1	-	1	-	1	1	1	- 1	-	1	-	- 1	-	-		1		1	1	1	-1	1	1	1	1	- }	i	1	1	1	1	- 1	- 1	- :
Total	1	1	-	1	-	9	4	-	1	-1	- 1	-1	13	3 24		6 10		-	8 Sun-stroke	1	63	-	1	1	90	-	03	1		+		-	+	- :	- 1	-
Males	1	1	1	1	-	9	67	=	- 1	- 1	1	-1	-	1 19		5	_	60	1 99	!	-		- 1	1	23	-	64	1		-	1	H	1	-1	- :	-
Females	- 1	. !	1	1	1	- 1	24	-;	1	1	- 1	- :		03	10	_		-		1	-	1	1	1	-	- 1	1	1	1	1	+	1	1	- }	-1	-
Total	-	- 1	-	- 1	1	1	H	1	1	1	-	+		-	10	- 90	_	9	2 Surgical Operation	оп	- :	- 1	j	- 1	1	:	1	- 1	- 1	H	1	1	1	-		-
Males	1	- ;	-	1	1	1	1	1	:	1	=	- 1	-	03		0.0	_	1	:	- 1	- 1	- }	i	- }	- 1	1	- }	- }	1	-	1	1	1	=	- ;	- 1
Females	1	- 1	1	1	i	1	-	1	- 1	- ;	- 1			63	03		63	63		- 1	- ;	- 1	1	-	7	- 1	-1	1	d	1	i	1	1	-	- 1	-
Males	1	1	- {	- 1	1	1	1	1	1	-	- 1	-	-	- 1	-		1	1	Syncope	1	- 1	-	1	- 1	- 1	- {	- 1	-	1	1	1	+	1	+	- 1	- !
Females		- 1	1	-	1	-	:	-	-	- 1	- 1	-	-	00	- !		- 1	1	* *	1	-	:	- 1	i	1	1	1	1	1	- 1	- 1	-	=	- ;	- 1	- 1
Total.	1	П	1	- 1	10	-	01	-	-	=	1	+	-	14	-	9 16	14	3	9 Syphilis	-	10	- 1	1	_ [62	-	1		1	=	i	1	- 1	- :	- :	- 1
Males	-	1	-		60	1	-	1	H	1		H		00	_	8	80	-		1	9	- 1	- 1	- 1	-	1	1	1	1	i	1	- 1	1	- 1	-1	-
Females.	-	1	1	-	63	-	-	H	1	H	- 1	- 1	_	9	00	89	- 00	7	1	1	-	1	- 1	1	1	1	1	1	1	=	1	1	1	1	- 1	- 1
Males	3	-1	1	-	1	1	1	1	;	- 1	- 1	- 1	1			_	- !		1 Tape Worm.	1	- 1	- 1	1	1	1	1	1	- 1	-	i	1	1	1	- :	- 4	- 1
Famalas										-	_	_					_																			_

	10	00	00	8 10	0 13	123	7	10	9	68	81	75	6	0 /0	ec	55 Teething	88	1	1	1	1	:	1	f	1	Ť	-	-	1	1	1	3
Males 3	7	63	02	00	63	NO.	10	*	1	17	88	40	82	35	40	*	4	1	1	1	- 1	- 1	- 1	- 1	- 1	1	-	- 1	- 1	- 1		- 1
Females 5	3	-	10	90	80	7	63	-	1	84	45	35 1	63	22 1	15	3	8	1	1	1	- 1	- 1	1	1			1	- 6	-1	- 1	- 1	_10
Total 1	1	60	÷	1	-	90	1	1	1	2	1	60	00	00	4	Tetanus (Locked Jaw)	62	1	=		-	1	1	-	Ì	1	+	+	Σ	-	- 1	- 1
Males	1	03	1	1	1	99	1	-	1	9	0	61	00	63	4	:	0	i	-		-	-	1	1	1	i	1	-1	3	-	- 1	-1
Females 1	1	1	1	1	1	- (1	1	1	-	99	-		-	1	:	-	1	1	1	- 1	-	i	1	1	1	1	1	1	- 1		:
Total 8	1 2	*	50	-	*	1	-	-	1	83	45	22	18	19 2	28	Throat Disease	10	03	63	н	-	8	93	1	63	ì	N	-	-	1	- 1	
Males 3	23	N	-	23	2/1	1	1	+	1	11	16	10	=	9 1	10	:	-	01	,01	-	=	-	0.3	- 1	00	1	- (=	- 1	- 1	- 1	-1
Females	1	63	6.1	-	23	- 1	-	+	1	6	6	123	7	10 1	16	3	*	1	- 1	1	-	23	-	i	- 1	1	1	-	-	_	- 1	-1
Total	1	1	- 1	1	-	i į	1	-		03	4	-	- 1	1	8	Throat, Inflam. of	1	-	1	1	- }	-	- 1	1	1	1	1	- 1	-	- 1	- 1	
Males	1	1	1	1	1	1	1	-	1	-	60	-	-	1	-	:	4	-	1	1	- 3	- 1	- 1	- 1		i	1	+	- 1	- 1	1	
Females	1	1	- ;	- /	- {	1	-	-	1	-	=	- 1	- 1	×	03	:	1	1	- 1	1	- 1	- 1	- 1	1	1	1	1	1	4	- 1	_ i	_ i
Males	1	1	- 1	1	1		1	- 1	1	;	-	1	-	-	H	Throat, Paralysis of	1	1	1	1	- 1	- 1	- 1			i	- 1	-	1	1	- 1	_;
Females	1	1	- 1	1			-	- 1	1	1	:	-	-	-	03	:	1	i	1		-	- 1	-	. :		1	-	- 1	-		- 1	
1	63	-	1	1	- 1	6/3	-	- 1	- 1	9	1	- 1	- !		H	Throat, Putrid Sore	43	-	1	1	1	- 1	1	4	- {	-	- 1	- 1	61	- 4	- 1	- 1
1	- :	1	-	- 1		63	-	-	1	00	1	1	- !	- 1	- 1	:	1	-	-	1	-		1	-	- 1	-	1	-	- 1	- 1	- 1	
Females	60	- [- 1	1	- 1	1	H	-	3	00	- 1	- 1	-1	_ !	- 4	:	-	1	+	1	- !	1	- 1	- 1	1		1	:	63	- 1		- 14
Total 1	1	1	- 1	-77	1		1	1	1	00	00	10	63	9	02	Thrush	63	1	1	- 1	- 1	- 1	1			1	1	1	- 1	- 1	- 1	, H
Males 1	1	- (1	- 1	1		1	-	1	* 44	-	-	93	63	7	3	63	1	1	1	+	1	- 1	- 1	1	T	1	- 1	+	- 1		
Females	1	. ;	1	7		- 1	- 1	1	1	-	63	4	.5	4	-	:	1	1	1	1	- 1	1	ij	J	1	1	+	- 1	1	- 1	- 1	-
Unknown .	of Of	1	+	- 1	- 1	1	1	+	1	1	+	1	1	- 5	н	:	1	Ť	1		1	1		1	1	T	1	1	1	- 1	-1	į.
Males	- 1	1	1	- 1	1	1	1	- 1	1	1	1	1		-	-	Tongue, Inflam. of	1	i	1	1	1	1	1		. 1	1	+	1	+	-1	- 1	
Males	1	1	- 1	1	- 1	- 1	1	1	1	1	1	1	63	-	1	Trichiniasis	Ť	1	1	1	1	1	1	1	1	1	+	1	1	-	- 1	
Total 1	-	1	-	1	1	-	-1	-	1	NO.	+	9	=	-	01	Tumor in Bowels	1	1	1	1	1	1	-	1	1	1	1	03	-	-	- 1	1
Males 1	1	1	- 1	1	1	- 1	1	- 1	- 1	-	1	ю	09	02	- 1	:	1	1	1	1	1	1	- [1	1	i	7	-	1	1	-1	
Females	7	ì	+	- 1	1	-	1	-	1	4	*	-	00	*	03	:	1	1	1	1	- 1	- 1	-	1	-	i	1	=	7	-	- 1	
Total	-	1	+	-	1	1	i	-	*	*	00	63	04	1	H	Tumor on Brain	1	=	н	-	-	1	1	1	1	1	1	1	1	1	1	J.
Males	1	1	÷	7	-	7			1	=	63	-	_	-	7	:					1	-3		4				-		-	3	_:

TABLE 78.—Continued.—Specified Causes of Death.

		-	-	-	Months, 1888.	the	188						R	i	Years.	ė								Age	ii se	- Pe	- rioc	ls o	Ages in Periods of Years,—1888.	are -	- F	œ _			
Ser.	January.	February.	March.	April.	May.	July.	,isugust,	September	October,	November.	December.	Unknown,	'888I	.788I	, 588I	1882	'#88T	1883,	Causes of Death.	Under 5.	.01 of 6	10 to 12.	.02 of dI	20 to 25.	25 to 30.	.68 of 08	.04 of 68	40 to 45.	45 to 50.	50 to 55,	55 to 60.	.07 of 58	,67 ot 07	.08 of 67	
Females	1	-	1	1	-1	1	1	- 1	₫		67	- 1	90	H	-	63	- 1	- 1	Tumor on Brain	- [-	7	-	1	1	1	-	- 1	- 1	1	- 1	- 1	- 1	- 1	
Total	-	i	1	=	- 1	-	-	- !	-	-	- 1	1	10	1	63	00	- 1		Tumor of Liver	- 1	1	1	1	1	1	4	1	1	=		-	-	-	- 1	
Males	-	1	1	-	-		-	- 1	1	-	1	- 1	*	1	-	64	1	1	, ,	9	1	1	-	1	1	1	1		-	-	-	_	1	- 1	
Females		1	- 1	- 7	-:	- 1	-	- !	7			- 1	1	-	-	H	- 1			- 1	1	-	1	1			1	-	+	-1	-1	- 1	-	- 1	
Males	1	1	1	- 1	1	1	- 1	- 1	- 1	1	14	i	1		-	1	-	***	Tumor in Side	-5	- (1	1	1	1	T	1	- 1	- 1	+	- 2	- 4	- 1	i	
Females	1	i	1	-	-	+	1	1	- 1	-	1	İ	- 1	-	-	1	63	1	и и	- ;	- 1	1	- 1	1	1	i	1	1	1		+	- 1	-1	:	
	1	00	1	F	H	-	60	-	1 1	_	- 1	1	=	12	00	10	9	00	Tumor in Stomach	63	1		- 1	H	- 1	-	-	1	1	-	-	1 2	- 1		
Males	1	63	1	- 1	-	-	1	-	_	1		- 5	10	60	00	93	4	1		- 1	1	- !	-	1	- 1	-	1	-	-	1		60	1	1	
Females	- 1	=	1	-:	1	-	69	-	1	-	- 1	- 1	9	6	20	63	63	-	:	23	1	1	- 1	-	1	1	1		-	+	10	_	1	1	
Males	1	-	1	-	- 1	1	1	- 1	1	-	-	1	-	43	-	-	-	1	Tumor on Throat	-1	. ;	1	1	1	1	1	1	1	1	- 1	-	1	- 1	1	
Females	. 1	i	- 3	-	- 1	1	1	- 1	- :	- 1	1	- ;	*	1	ਜ	1	- 1	3		- 1	1	4		- 1	1	1	1	-	1	- 3	- 1	- 1	- 1	1	- 1
Total	-	12	9	10	1	10	*	8 10		8	10	-	72	62	90	67	75	41	Tumor(unspecified)	10	- 1	1	1	*	10	00	10	6	10	00	10	00	4	60	
Males	00	10	01	=	1 1	1		*	-	-	-	- 1	23	41	13	21	17	13		*	-	:	-	-	1	63	-	+	01	+	-	99	63	04	
Females	*	-	+	4	1	00	*	4	7	63	*	-	49	48	47	46	37	88		-	1	1	4	00	0	-	4	00	93	60	10	10	64	20	
Females	1	H	-	-	-	- ;	- 1	-	_	1	1	- 1	7	00	10	10	9	10	Turn of life	1	1	- [1	1	1	1	1	- 1	H	01	63	63	-1	- 1	- 1
Males	- 1	1	1	+	:	- 1	- 1	-1	1	1	1	1	-	1	1	1	1	i	Ulcer on neck	-	1	1	1	1	į	1	1	1	1	÷	1	-	1	1	- 1
Total	-	-	-	-	67	-	67	- 1	1	- 1	62	1	00	13	10	7	7	9	Ulcers (unspecified)	-	- 1	- (-	1	- 1	1	1	1	1	:	-	-	1	63	
	1	1	=	-	99	1	-	- 1	- 1	1	7	-1	9	7	10	9		-	:	- 1	- ;	- 1	1	- 1	1	1	- 1	- 1	7	1	1	_	-	62	
Females	1	1	1	1	1	-	-	- 1	- 1	1		1	63	8	10	1	00	10		-	1	1	-	1		1	1	- :	7	-	1	- 1	- 1	- 1	
Total	74	88	66	84 10	021 80		126 126	6 113	88	16	101	27	1224	1249	1040	949	949 1066	1385	Unknown	627	47	21	88	25	35	35	62	32	62	36	88	17 69	36	23	
							}	1							Ì					i						P		1/		-				Ī,	

Females 33 44 45 37 50	200	3	9	2	0 40	0 0	8	200	ŝ	1	-	0	,,,	070	104	704	200	020	Unknown	-	10		12 -16	82	17	77	20	12	9	6	17	23	13 1	14	6	0 04
Unknown.	1	1	1	-	1	1	1	-1	1	i	1	1	1	10	7	99	10	9	,,		1	1	1	1	1	1	i	-	1	:	- 1	- 1	1	- 1	- 1	- 1
Total	H	1	-	-	- !	-	1	- 1	_	1	- 1	1	*	00	1	9	1	0.1	Uræmia	1	-	1	1	- 1	-	-	i	1	÷	:	1	-	-	-	-	- 1
Males	H	1	+	- 1	- 1	-	1	-	-1	- 1	- 1	1	93	63	1	4	- 1	00	*	1		1	1	- 1	1			EÌ	1	1	1	=	- 1	-	-	- 1
Females	1	1	-	+	-	- 1		1	-	1	1	-1	-	-	н	03	1	1	#	- 1	- 1	1	1	1	н		i	1	1	1	1	1	1	- 1	- 1	- 1
Males		1	- 1	7	1	H	1	- [_ (-	- 1	-1	93	-	=	-	63	91	Urin'ry Org'ns, Dis, of	-	- 1	-	1		1	-		1	1	1	- 5	-	1	-	-	_1
Females	1	1	1	1	- 1	- 1	-		1	i	1	i	1	1	-	-	1	1		-1	1	1	1	1	-1	1	1	1	1	1	3	1	- 1	- 1	1	- 1
Females	-	1	- 1	1	1	1	- 1	-	- 1	1	1	1	67	-	6	02	20	93	Uterine Tumor	- i	- 1	- 1	1	1	1	-	1	- 5	H	3	1	1	+	1	- 1	1
Females	- 1	1	-	- 1	1	- 1	1	i	-1	- 1	i	i	1	- 1	н	1	1	1	Uterus, Abscess of	- 1	-	- 1	1		- 1	1	1	-	- 1	- 1	1	- 1	- 1	1	- 1	- 1
Females	1	-	+	- 1	-	-	-	63	7	-	- 1	1	00	12	7	*	13	51	Uterus, Disease of.	- 1	1	1	1	.1	1	- 1	1	63	H	63	-	1	-	- 1	- 1	1
Females	i	1	-	-	00	- 1		-	- 1	-	1	1	00	7	10	4	10	63	Uterus, Inflam, of	- 1	- 1	1	27	01	- }	03		1	H		+	+	1	- 1	1	- 1
Males	i	-	- 1	+	- 1	1	1	1	- 1	1	1	i	1	1	-	-	1	-	Vomiting	- 1	- 1	1	1	3	1	1	- 1	1	+	1	- 1	1	4	1	- ;	- 1
Females	1	- 7	1	1	1	- 1	1	- [- 1		1	i	1	00	-	i	-	1	,	1	- 1	1		1	- 1		1	-	1	-1	-	-1	- 1	-	- 1	- 1
Males	1	1	- 1	1	3	- 1		- 1	- 1	- 1	1	ì	-	1	1	1	1	63	White Swelling	1	- 1	1			1	-	1	1	+	1	+	+	- 1	- ;	- 4	- (
Total	9	7	16 1	日日	113	3 15	20	83	19	112	19	1	174	110	185	138	160	92	Whooping-cough	. 166		00	1	1	- 1	- !	1	1	1	- 1	1	- 1	1	- 1	- ;	1
Males	67	99	10	00	NG.	9	9	13	10	63	=	1	69	16	8	22	75	40	1 .	- 68	22	1	1	1	-9	- 1	- 1	1	-	4	1	-1	1	1	- 1	- 1
Females	4	7	=	8	6 10	6 (14	13	6	10	00	1	105	20	102	81	8	52		100	89	63	1	- 1	1	1	1	1	- 1	- 1	-	1	1	1	- 1	- 1
Unknown.	1	-	-	- 1	- 1	1	- }	1	-	- 1	1		1	1	F	1	1	1	:	-	1	1	1	- 1	- 1	1		1	+	- 1	1	- 1	- 1	- 1	- 1	- 1
Total	1	H	63	=	- 1	1	1	1	- 1	1	-		0	4	7	-	9	62	Worms	7		1	1	1	- }	1	1	- 1	1	:	- 1	-1	- 1	1	-1	
Males	1	-	1	-	-	1	- 1	-		1	1	- 1	+	1	*	-	00	93	"	00	65	1	1	1	- 3	- 1	1	- 1	1	- 1	1	1	1	1	-	- 1
Females		- [-	-	-	1	- ;	1	1	-	1	- 1	-	4	99	į	00	-		-		- 1		1	-1	- 1	1	1	1	-1	1	- 1	- 1	- 1	-1	- 1
Males	-		-		-	20	L		-	-	-	-	*	=	9	NO.	00	00	Wounds				1		5				-			00	_	-	- 1	- 1

UNUSUAL CAUSES OF DEATH.

The number of deaths in 1888 compiled in Table 78 as "Casualty" was 364, which was 21 less than in 1887. Accidental shooting had 3 fewer victims than in 1887. Horses, by kicking, runaways, and wagon accidents, managed to dispose of 43 human lives in 1888 as compared with 37 in 1887. Returned as simple "accidents," without specifying the cause, there were 154 as against 167 in 1887. The number who lost their lives while engaged in mining was large as usual.

Casualty,—Causes as returned.	No.	Casualty,—Causes as returned.	No.
Total number tabulated as Casualty in Table 78	364	Fall of stone	1 6
		Hung in crib	1
Accidental, unclassified	154	Killed on a boat	2
Accidental poisoning	8	Killed by a cow	.1
Accidentally burned	5	Killed in car shop	1
Accidentally shot	14	Killed in elevator	1
Bursting of emery wheel	2	Killed by an ax	1
Crushed in machinery	4	Killed by fire department	1
Crushed under timber	4	Killed by a horse	2
Drank kerosene	1	Killed in mill	22
Explosion of boiler	2	Killed in mine	30
Explosion of dynamite.	4	Killed in lumber woods	7
Explosion of lamp	2 8	Killed on toboggan slide	1
Explosion of powder.	4	Killed under a tree	1
Fall	2	Kicked by a horse	19
Fall from building	4	Lost in woods	2
Fall from horse	3	Runaway	14
Fall from scaffold	12	Scalded, hot water	5

STATISTICS CONCERNING SUICIDE.

The total number of deaths reported as due to suicide in Michigan during the fifteen years from 1874 to 1888 was 1,105, of which number 836 were males, and 268 were females. For the year 1888, there were 101, of which 82 were males and 19 were females.

Table 80 shows the distribution of suicides, by months, as recorded for each year and the total for the entire period. It will be seen that the tendency was to the occurrence of the greatest number of suicides during the months of May, June, and August. This tendency appears to be the same everywhere, not only in the United States, but also in the countries of Europe.

It is a fact worthy of note that during all these years only one death of a colored person has been returned as due to suicide, that being the case of a mulatto in 1878.

The classification by nativity shows that 607 were born in the United States, 260 having been born in Michigan, and 347 in other States. Four hundred and fourteen were born in foreign countries, and in 84 cases the nativity was not reported. Of the foreign-born 63 were from Canada, 53 from England, 208 from Germany, 33 from Ireland, and 15 from Scotland. The classification by conjugal condition shows that 657 were married, 301 were single, 97 were widowed, and in 50 cases the conjugal condition was not stated in the returns.

The relative prevalence of certain modes of suicide may also be seen. Suicide by shooting and hanging are the most common means employed by males, but are comparatively rare among females, who resort to poison or drowning. In 582 cases the manner of death was not stated in the returns.

TABLE 80.—Certain facts Concerning Persons returned as having Died by Suicide in Michigan during the years 1874-1888.

						Mo	Months of Death.	f Deat	p.					1		Sex.	ī	Color.		Condition.	on.
Years.	Younber,	January.	February.	March.	April.	Мау.	.sam.t	July.	August.	September,	October.	Мотетьет,	December.	Такоома.	Totals.	Males.	Females.	White.	Married.	Single.	Widowed.
Totals	1,105	62	8	73	8	110	110	06	Ħ	96	100	101	103	NG.	1,105	836	268	1,105	657	301	97
1874	82	-	63	*	-	*	10	10	+	00	10	9	80		23	8	23	53	88	11	4
1875	22	63	*	63	4	00	*	*	+	20	99	9	4	-	52	42	10	52	2	10	00
1876	3	62	-	63	7	7	00	61	+	10	9	10	93		24	43	Ħ	75	32	12	00
1877	99	63	10	7	4	7	10	9	7	4	63		10		99	46	20	99	88	23	63
1878.	63	10	62	10	10	10	8	10	7	10	9	20	4	-	68	9	23	a63	41	16	4
1879.	29	60	69	*	7	60	00	10	7	0	4	4	1		28	46	13	29	35	19	00
1880	29	+	89	9	80	6	9	69	+	7	94	9	9	-	65	20	15	65	88	20	*
1881	22	1	NO.	60	69	*	4	7	6	7	4	9	4	1	22	42	15	57	34	Ħ	6
1882	62	69	00	+	9	00	7	67	7	10		4	9	1	62	11	18	62	82	24	00
1888	16	10	-	1	0	10	00	п	6	*	9	16	10	1	16	69	22	16	53	83	123
1884	104	4	10	7	œ	9	16	00	00	14	10	10	80	-	101	8	30	104	11	88	4
1885	16	*	4	60	7	1-	6	6	Ħ	*	14	10	00	1	169	78	12	16	22	19	13
1886.	88	-	63	*	9	13	10	4	=	8		9	6	1	85	19	18	85	46	20	11
1887.	105	63	*	10	12	==	1/2	10	12	10	13	9	6		105	75	30	105	63	83	10
1888	101	9	4	99	10	13	n	a	7	6	11	00	00	93	101	82	19	101	Z	31	12

 ${\bf TABLE~80.-Continued.--} Suicidal~Deaths.$

Occupation.	No.	Occupation.	No.	Occupation.	No.
Agents	7	Gardeners	2	Peddlers	8
Architects	1	Grain dealers	1	Physicians	7
Bakers	2	Harness-makers	2	Policemen	1
Bankers	2	Hatters	1	Printers	4
Barbers	2	Hotel-keepers	4	Prostitutes	7
Blacksmiths	4	House-keepers	98	Sailors	8
Book-keepers	11	House-wives	22	Salesmen	8
Brewers	4	Housework.	2	Saloon-keepers	21
Brick-makers	8	Insurance agents	8	Seamstresses	1
Business men	8	Laborers	148	Servants	. 27
Butchers	5	Lawyers	6	Ship-carpenters	1
Cabinet-makers	8	Lumbermen	4	Shoe-makers	11
Carpenters	29	Machinests	5	Soldiers	8
Cigar-makers	5	Manicure	1	Stave-makers	1
Clerks	19	Masons,	8	Students	
Conductors	1	Mechanics	11	Tailors	7
Contractors.	1	Merchants	19	Tanners	8
Coopers	.8	Millers	8	Teachers	4
Cutters	1	Milliners	1	Teamsters	١,
Dentists	1	Miners	5	Tinners	1
Domestics	5	Ministers	1	Unemployed	85
Draymen	5	Mill owners	1	Unknown	1
Druggists	2	Miscellaneous	9	Upholsterers	1
Engineers	5	Musicians	4	Waiters	1
Farmers	825	Painters	7	Weavers	
Farmers' wives	8				
Total					1,100
Means Used.	No.	Means Used.	No.	Means Used.	No.
Burning	1	Insanity	1	Shooting	109
Cutting throat	23	Poison	169	Starving	1
Drowning	59	Run over by cars	2	Strangulation	ı
Dynamite	1	Severing artery	8	Unknown	583
Hanging	152				
Total					1,100

TABLE 80.—Continued.—Suicidal Deaths.

Nativity.	No.	Nativity.	No.	Nativity.	No.
Austria	1	Italy	1	Poland	8
Bohemia	1	Kentucky	1	Prusssia	10
Canada	68	Maine	8	Rhode Island	1
Colorado	1	Massachusetts	5	Scotland	15
Connecticut	6	Michigan	260	Sweden	7
Delaware	1	Minnesota	1	Switzerland	2
Denmark	1	Netherlands	1	Texas	1
England	58	New Hampshire	3	United States	\ :
France	5	New Jersey	6	Unknown	84
Germany	208	New York	191	Vermont	11
Holland	5	Norway	1	Virginia	;
Illinois	8	Nova Scotia	2	Wisconsin	,
Indiana	9	Ohio	59	Zealand	
Ireland ;	33	Pennsylvania	28		}
Total					1,100

PRINCIPAL CAUSES OF DEATH.

TABLE 81.—Mortality in Michigan from Fifteen Principal Causes, as Returned for the Year 1888.

	Specified Causes and Conditions, 1888.	:	Number o	f Deaths.		Per Cent	from Eacl	h Cause to Causes.
Order.	Conditions, 1666.	Totals.	Males.	Females.	Unk.	Totals.	Males.	Females.
1	Consumption	2,424	1,108	1,821		11.14	9.41	13.18
2	Still-born	1,358	809	534	15	6.24	6.90	5.88
8	Pneumonia	1,190	654	586	ļ	5.47	5.58	5.35
4	Old age	1,174	586	588		5.89	5.00	5.87
5	Heart disease	864	488	875	1	8.97	4.16	8.74
6	Cholera Infantum	767	410	857		2.52	3.50	8.56
7	Diphtheria	717	870	847		8.29	8.16	8.46
8	Apoplexy and Paralysis	697	887	810		3.20	8.30	3.09
9	Fever, Typhoid	63 8	853	285		2.98	8.01	2.84
10	Convulsions	516	295	221		2.87	2,52	2.20
11	Cancer	480	193	287		2.21	1.65	2.86
12	Croup	474	260	214		2.18	2.22	2.13
13	Dropsy	462	222	240		2.12	1.89	2,39
14	Measles	414	192	221	1	1.90	1.64	2.20
15	Brain, Inflammation of	405	218	187		1.86	1.86	1.87
	Totals	12,580	6,540	6,023	17	57.80	55.79	60.09
	All Causes	21,764	11,722	10,024	18	100.00	100.00	100.00

Table 81 gives the fifteen principal causes of death in 1888, arranged according to the order of their fatality. Consumption, as usual, held the first rank as a destroyer of Michigan lives. Since the beginning of registration, consumption has held first place each year, except in 1881, when diphtheria stood first. The per cent of deaths from consumption to deaths from all causes was 11.14 in 1888, 10.92 in 1887, 11.28 in 1886, 11.80 in 1885, 12.17 in 1884, and 11.78 in 1883. It is thus seen that consumption had about its usual proportion of deaths in 1888.

With the other causes of death, the order in regard to the largest number varies more or less from year to year. The most noteworthy change from 1887 was in diphtheria, which stood second in 1887 and now stands seventh in 1888. Pneumonia, occupying fifth place in 1887, rose to third place in 1888, while typhoid fever, which stood sixth in 1887, dropped back to ninth place in 1888. Measles, for the first time in the history of registration, occupies a place among the list of diseases in table 81.

Cancer maintains nearly a uniform rank from year to year. Diarrhea, which ranked twelfth in 1887, does not appear in 1888. Scarlet fever, which stood sixth in 1883, fell to fourteenth in 1884, since which time it has not appeared in the table.

The fifteen principal causes of death represent 57.80 per cent of the total mortality in 1888, as compared with 55.91 in 1887, 56.83 in 1886, 57.44 in 1885, 57.66 in 1884, and 56.92 in 1883.

MORTALITY FROM TEN PROMINENT CAUSES IN 1888.

In Tables 82 and 83 are presented the number and proportion of deaths from ten prominent causes in 1888. By these tables it appears that cancer and typhoid fever were the most distructive causes of death for all ages between 5 and 80 years. Diarrhea and whooping-cough were the most distructive causes among children under 5, and diphtheria and scarlet fever among children between 5 and 10 years of age. As usual, diphtheria proved to be the cause of the greatest mortality of the ten leading diseases included in the tables, although not the cause of the greatest mortality in the State. Dysentery occupied the lowest place, which was accorded to whooping-cough in 1887.

Among the many noteworthy features displayed in these tables may be mentioned the fatality of cancer at ages from forty to seventy and that each year many more females than males die of this disease. In 1888, cancer appears to have been especially fatal in the months of October and November. Cephalitis was most fatal in April, August and December and at ages under five years. Croup and diphtheria were most fatal during the fall and early winter and least so in summer. Measles and scarlet fever appear to have been most fatal during the spring months of 1888 and as usual, at ages under 10.

Diarrhea and Dysentery again attest the terrible inroads which are made each summer into infantile life by these fatal diseases. These diseases are of very little prominence until July and then fall off again in November, the greatest mortality being at the extremes of life, infancy and old age. In 1888, measles was a disease of more than usual prominence and occured mostly in the months of April, May and June, and at ages under ten. The mortality from typhoid fever increased rapidly in August, reached its highest point in October and then declined again in December. More than a third of the decedents from this disease were between fifteen and thirty years of age, and the deaths among males exceeded those among females by about 11 per cent.

Many of these diseases will be considered on subsequent pages in connection with meteorological conditions.

TABLE 82.—Deaths from ten specified causes returned for the year 1888, exhibiting the number of each sex, total number in each month and at different periods of age.

	a				Ce	ruses of I	Death, 1	888.			
	Sex, Months and Ages.	Cancer.	Cepha- litis.	Croup, a	Diar- rhea, b	Diph- theria,	Dysen- tery. c	Measles.	Scarlet Fever.	Typhoid Fever.	Whooping cough.
	Totals	480	405	474	371	717	153	414	828	688	174
×i	Males	198	218	260	206	870	68	192	170	353	-69
Sex.	Females	287	187	214	165	847	85	221	153	285	105
	Unknown							1			
	January	20	26	51	4	50	2	27	25	27	đ
	February	32	18	81	8	61	1	35	21	81	7
	March	36	38	38	7	64	1	45	33	36	16
	April	40	48	38	9	49	1	64	85	42	11
	May	44	81	41	11	42	5	86	20	28	· 11
	June	47	26	18	28	59	9	60	25	19	18
ę Ę	July	44	81	82	85	40	16	21	25	28	15
Months	August	44	47	84	98	55	45	21	20	62	20
24	September	33	40	82	76	39	42	15	30	98	25
	October	49	81	50	23	94	21	15	26	134	19
	November	58	28	42	14	73	3	12	30	78	12
	December	87	41	66	18	91	7	13	33	59	19
	Unknown	1		1				<u> </u>		1	
	Av. Month d	40	34	40	81	60	18	85	27	58	15
	Under 5	11	225	411	888	856	95	280	205	57	166
	5 to 10	1	37	52	2	224	9	45	81	41	· 5
	10 to 15	2	20	5	1	78	2	14	19	63	8
	15 to 20	2	21	1	2	38	1	22	9	85	
	20 to 25	12	17		1	8		15	1	89	
	25 to 80.	5	8		1	6		10	2	6 8	
	30 to 35	12	10	 	2	6	. 8		. 8	39	
İ	35 to 40	20	11		1		2	11	2	46	
انه	40 to 45	46	14		2		8	4		23	
A608	45 to 50	42	8		1	2	2	4		28	
	50 to 55	55	6		8	1	2	1		20	
	55 to 60	44	8		5	1	8	1		16	
	60 to 65	68	4		8		6			19	
	65 to 70	65	5		 -		1			12	 -
	70 to 75	45	5		5		6	1		11	-
İ	75 to 80	80	2	1	4		8			. 6	
	80 and over	16			5	1	11			4	
	Unknown.	4	4	4	-	1	1	6	1	11	

^{*} Includes 90 membranous croup. * Includes 16 chronic.

c Includes 3 chronic.
d Excluding unknown month.

TABLE 83.—Per cent of Deaths returned for the year 1888, from each of ten specified causes to deaths from all causes, and per cent of each sex, of deaths in each month and at different periods of life, to total deaths from each specified cause.

				Caus	es of De	ath, 1888	3.—Per (Cent of T	otal.		
Se	x, Months and Ages.	Cancer,	Cepha- litis.	Croup.	Diar- rhea.	Diph- theria.	Dysen- tery.	Measles.	Scarlet Fever.	Typhoid Fever.	Whoop- ing- Cough.
Per	r cent of all causes	2.21	1.86	2.18	1.70	3.29	.70	1.90	1.48	2.93	.80
	Males	40.21	53.83	54.85	55.53	51.60	44.44	46.38	52.63	55.33	39.66
26	Females	59.79	46.17	45.15	44.47	48.40	55.56	53.38	47.37	44.67	60.34
	January	4.17	6.42	10.76	1.08	6.97	1.31	6.52	7.74	4.23	8.4
	February	6.67	4.45	6.54	.81	8.51	.65	8.46	6.50	4.78	4.0
	March	7.50	9.38	8.02	1.89	8.93	.65	10.87	10.22	5.64	9.20
	April	8.33	11.85	8.02	2.48	6.83	.65	15.46	10.83	6.58	6.3
	May	9.17	7.66	8.65	2.96	5.86	8.27	20.78	6.19	4.39	6.3
	June	9.79	6.42	3.80	7.55	8.23	5.88	14.49	7.74	2.98	7.4
ф.	July	9.17	7.65	6.75	22.91	5.58	10.46	5.07	7.74	4.39	8.6
Months	August	9.17	11.61	7.17	26.41	7.67	29.42	5.07	6.19	9.72	11.4
_	September	6.87	9.88	6.75	20.49	5.44	27.45	3.62	9.29	15.36	14.8
	October	10.21	7.65	10.55	6.20	13.11	13.73	3.62	8.05	21.00	10.9
	November	11.04	6.91	8.86	8.77	10.18	1.96	2.90	9.29	11.44	6.9
	December	7.71	10.12	13.92	3.50	12.69	4.57	8.14	10.22	9.25	10.9
	Unknown	.20		.21						.16	
	Average month	8.33	8.40	8.44	8.36	8.37	8.50	8.45	8.36	8.81	8.6
	(Under 5	1	55.56	86.71	89.75	49.65	62.09	67.68	63.47	8.94	95.4
	5 to 10	.21	9.14	10.97	.54	31.24	5.88	10.87	25.08	6.43	2.8
	10 to 15	.42	4.94	1.06	.27	10.18	1.81	3.38	5.88	9.87	1.7
	15 to 20	1	5.19	.21	.54	5.30	.66	5.81	2.78	13.82	
	20 to 25		4.20		.27	1.12		3.62	.81	18.95	
	25 to 80	1	1.97		.27	.84		2.42	.62	10.66	
	30 to 35		2.47		.54	.83	1.96		.93	6.11	
	35 to 40	1	2.72		.27		1.81	2.66	.62	7.21	
	40 to 45	1	8.46		.54		1.96	.97		8.61	
96.	45 to 50	i i	1.97		.27	.28	1.81	.97		4.39	
٦.	50 to 55	11.46	1.48		.81	.14	1.81	.24		3.18	
	55 to 60	9.17	1.97		1.35	.14	8.92	.24		2.51	
	60 to 65	14.17	.99		.81		8.92			2.98	
	65 to 70	1	1.28				.65			1.88	
	70 to 75	i	1.23		1.35		3.92	.24		1.72	
	75 to 80	6.25	.49	.21	1.08	·	1.96	.22		.94	
	80 and over	1		10.01	1.08	1,4				1	
	ì	1	~~	0.4	1.04	.14	7.19	1,1		.63	
	(Unknown	.83	.99	.84		.14	.65	1.45	.31	1.72	

a Excluding deaths in unknown month.

MORTALITY FROM CANCER.

There were 480 deaths from cancer in 1888, as compared with 453 in 1887, 391 in 1886 and 403 in 1885. Table 84 shows the mortality from cancer, by sex and part of body affected so far as stated in the returns, for the 17 years, 1872-1888. The aggregate number of deaths from this disease for the above period of years was 5,105, being an average of 300 per year. With the exception of three years, 1882, 1884 and 1886, there has been a constant increase of deaths from this cause since 1871. The returns in 1888 give 27 more deaths than in 1887, and is the largest number ever reported from this cause. As usual, there were more deaths in 1888 among the females than among the males, the excess being 94, while the average excess for the seventeen years was 42.

In 1888, there was no great variation in the number of deaths by months in each half of the year, but there was quite an excess in the last half over the first, the deaths as returned being 209 for the first six months to 260 for the last six, or an excess of 41 in the last half. The largest number of deaths occurred in November and the least number in January.

Over 92 per cent of the deaths occured between the ages of 30 and 80 years, and 33 deaths only occurred among persons under 30 years of age.

Of the deaths returned from cancer without definite statement as to the organs of the body affected, there were 2,513, nearly one-half. Of those, in which the particulars as to location were specified, cancer of the stomach had by far the largest number, while cancer of the breast was second.

TABLE 84.—Deaths from Cancer in Michigan Returned for the Years 1872–1888, Indicating Part of Body Affected.

Part Affected.	Total.	Males.	Females	Part Affected.	Total.	Males.	Females
Aggregate, Years 1872-1888	5,105	2,196	2,909	Cancer of liver	111	62	49
				Cancer of lungs	12	7	5
Cancer of arm	6	8	3	Cancer of mouth	72	48	24
Cancer of bladder	12	10	2	Cancer of neck	22	15	7
Cancer of bowels	107	89	68	Cancer of nose	2	2	
Cancer of breast	342	23	819	Cancer of cesophagus	_	1	2
Cancer of ear	1	1		Cancer of pancreas	3	2	
Cancer of eye	15	7	8	Cancer of rectum	17	10	,
Cancer of face	164	117	47	Cancer, rose	8	4	'
Cancer of foot	8	8		Cancer of shoulder	2	2	*
Cancer in groin	4	8	1	Cancer of side	11	2	9
Cancer of hand	8	2	1	Cancer of spine		. 2	8
Cancer of head.	30	18	12	Cancer of stomach		790	498
Cancer of heart	4	2	2	Cancer of throat		84	28
Cancer of hip	1	' 1			20		10
Cancer, internal	31	9	22	Cancer of tongue		10	
Cancer of kidneys	6	6		Cancer (unspecified)	ľ	950	1,563
·	_	11	5	Cancer of urethra	1		1
Cancer of leg	16	11	5	Cancer, uterus	213		213

METEOROLOGY AND ITS RELATION TO DEATHS.

Each year there has been published in these reports some of the results of meteorological observations made by observers for the State Board of Health, the U. S. Signal Service, and at the State Agricultural College. The principal conditions exhibited in the following tables are temperature, humidity of the air, ozone, velocity of the wind and pressure of the atmosphere. Study is here made of the occurrence of deaths from different diseases in connection with the above conditions as observed at representative stations in Michigan during the same year and months.

Through the kindness of the Secretary of the State Board of Health, we have been allowed the use of these statistics.

Table 85 shows that the annual average temperature for 1888 was higher than that of any year since 1882, although not as high as that for the average for ten years. The month of August, 1888, was warmer than for any year since 1882, and the month of June was the hottest of any year of the table.

TABLE 85.—Temperature.—Average by years and by months, for the years 1879–1888, inclusive, at Representative stations in Michigan.

		Average,		Averag	ge Tem	perati	ire, Sta	ated in	Degre	es Fal	renhe	it, by 1	Months	
	Years.	Annual Aver	January.	February.	March.	April.	May.	June.	July.	August,	September.	October,	November.	December.
1879	(19 stations)	46.82	20.86	20.69	33.08	44.29	58.03	64.70	73.16	68.99	57.43	57.43	36.80	26.41
1880	(15 stations)	46,55	34.06	27.93	31.00	44.39	62.27	67.41	69.39	68.07	59.54	46.69	27.24	20.67
1881	(20 stations)	47.22	14.93	19.75	29.36	40,53	62.72	63.32	72.95	71.76	67.99	51.87	37.42	34.03
1882	(22 stations)	47.14	24.82	33.42	34.12	42.65	51.04	64.43	67.84	69.05	61.70	53.53	37.90	25.72
1883	(19 stations)	43.52	15.78	20.03	24.63	43.00	51.37	64.73	68.36	65.41	57.24	46.73	38.10	26.89
1884	(20 stations)	44.72	15.14	20.94	28.78	42.00	54.38	67.04	66.70	66.10	64.72	51.56	34.53	24.77
1885	(21 stations)	42.36	15.46	10.21	19.51	41.39	53.32	63.39	71.13	63.23	59.14	45.78	38,14	27.59
1886	(17 stations)	44.82	18.72	21.18	30.10	46.04	54.69	63.31	68.68	67.36	61.15	51.84	34.32	20,44
1887	(17 stations)	44.82	16.58	21.57	25.55	42.09	60.68	66.53	73.22	66.41	57.95	44,46	35.18	27.57
1888	(13 stations)	45.03	15.93	21.65	25.89	42.81	53.40	68.03	70.95	68.05	58.20	46.01	38.73	30.78
Aver	age for 10 years a.	45.30	19.18	21.74	28.20	42,92	56.19	65.29	70,24	67.44	60.51	49.59	35.84	26.48

a Average for the ten years ending with 1888.

The Stations represented in the lines for average temperature for the years 1879–1888 in Table 85 are the following: Thornville, Kalamazoo, Lansing; Mendon for 1879–1882; Tecumseh for 1879, 1885 and 1888; Battle Creek for 1879, 1880, 1882, 1885, 1888; Nirvana 1879, and first 4 months of 1880; Reed City for last eight months of 1880 and 1881–1885; Coldwater, Ypsilanti, Woodmere Cemetery, Petoskey for 1879; Otisville for 1879, 1880, and 1881; Niles for 1879 and 1881; Marquette for 1879, 1884, 1886 and 1887; Alpena, Grand Haven, Port Huron, Detroit for 1879–1887; Washington for 1879–1883; Agricultural College for 1881–1888; Escanaba for 1880–1887; Harrisville for 1881 and 1882, 1885 and 1886; Ann Arbor for 1881–1888; Parkville for 1881 and 1882; Traverse City for 1882–1888; Hillsdale for 1882–1884; Marshall for 1882–1888; Winfield for 1881 and 1883; Hudson and Mallory Lake for 1881; Ionia for 1883–1885; Manistique, Swartz Creek for 1884 and 1885; Mackinaw City for 1884–1887; Port Austin for 1885 and 1888; Muskegon, Pentwater for 1886; Gulliver Lake, Birmingham, Otsego for 1887 and 1888.

TABLE 86.—Pressure of the Atmosphere.—Observations of barometers reduced to freezing point for each of the years 1879–1888, inclusive, and the average for ten years, at Representative stations in Michigan.

	ns.	Average.	Pre	ssure of	the At	mosphe	ere, Sta	ted in I	nches o	f Murc	urial C	olumn,	by Mon	ths.
Years.	No. of Stations.	Annual Aver	January.	February.	March.	April.	May.	June.	July.	August,	September,	October,	November.	December.
1879	13	29.155	29.169	29.173	29.163	29.122	29.176	29.121	29.091	29.106	29.188	29.221	29.152	29.176
1880	14	29.133	29.134	29.105	29.191	29.048	29,092	29,085	29.106	29.163	29.153	29.150	29.231	29.139
1881	12	29.151	29.209	29.222	28.979	29.120	29.175	29.082	29.146	29.180	29.122	29.220	29.164	29.187
1882	21	29.138	29.186	29.121	29.149	29.153	29.123	29,001	29.118	29.112	29.202	29.134	29.224	29.135
1883	17	29.189	29.221	29.328	29.145	29,125	29.099	29.072	29.140	29.233	29.238	29.275	29.182	29,205
1884	18	29.205	29.274	29.204	29.202	29.147	29.131	29.278	29.100	29.216	29,210	29.268	29.213	29.229
1885	19	29.152	29,200	29.119	29.186	29.194	29.092	29.181	29.126	29.151	29.195	29.145	29.092	29.135
1886	15	29.192	29.188	29.198	29.126	29.230	29.128	29.161	29,159	29.166	29.222	29,331	29.137	29.226
1887	15	29.215	29.118	29.310	29.250	29.152	29.204	29.203	29.188	29.234	29.305	29.185	29.211	29.218
1888	12 ,	29.158	29.278	29.129	29,203	29.250	29.065	29.069	29.166	29.144	29.174	29,070	29.202	29.143
Average	n	29.169	29.198	29.191	29.159	29.154	29.129	29.125	29,134	29.171	29.201	29.200	29.181	29,179

Average for ten years ending with 1888.

The Stations represented in the lines for average atmospheric pressure for the years 1879–1888 in Table 86 are the following: Lansing for 1879–1888; Kalamazoo for 1879–1882, and 1885–1888; Battle Creek for 1879, 1880, 1882, 1888; Detroit, Alpena, Grand Haven, Port Huron 1879–1887; Woodmere Cemetery, Ypsilanti for 1879; Mendon for 1881–1883; Marquette for 1879, 1884, 1886 and 1887; Agricultural College, Ann Arbor for 1881–1888; Otisville for 1879, 1880 and 1882; Tecumseh for 1879–1880 and 1882–1885; Washington 1879, 1880, 1882 and 1883: Nirvana for 1879, and first 4 months of 1880; Reed City for last 8 months of 1880–1885; Thornville for 1880–1881 and 1884–1888; Escanaba for 1880, 1882–1887; Traverse City for 1882–1888; Harrisville for 1882 and 1885–1888; Hastings for 1882; Hillsdale for 1882 and 1883; Port Austin for 1883, 1884 and 1888; Marshall for 1883–1888; Manistique 1884 and 1885; Mackinaw City for 1884–1887; Ionia for 1884 and 1885; Swartz Creek for 1885; Birmingham for 1888 and 1887; Gulliver Lake for 1888.

Croup—This disease was returned as the cause of 474 deaths in 1888, as compared with 399 in 1887, 400 in 1886, 337 in 1885, and is the greatest number ever reported in any one year.

The ratio of mortality from croup to the total mortality was 2.18 per cent, which was more than that of 1887 by .13 of one per cent, but slightly less than the proportion for 1886, although the number of deaths in 1888 was more than those in 1886 by 74.

The three most fatal months, in the order named were December, January and October and they contributed 167 of the 474 deaths. The greatest monthly mortality was in December, 13.95 per cent, and the least in June, 3.81 per cent. A very large portion of the mortality occurred among children under 5, the per cent in 1888 being 86.71.

Table 87 shows certain meteorological data in connection with deaths from croup. There were more exceptions to the propositions named than for the previous year.

TABLE 87.—Deaths returned from Croup in Michigan, by Months, during the Year 1888, and Certain Meteorological Conditions at Representative Stations in Michigan, during the same year and months.

		Death		Temper Degrees		Humid	ity of A Ionthly	tmosph Averag	ere, etc., res.	Ozon Rela Maxii =1	tive	r hour,-	meter Re-
by	Months in Order Number of Deaths from coup, greatest first.	Number.	Per cent of Total,	Average Daily Range by Registering Thermometers,	Average of Three Daily Observations.	Relative Per cent of Saturation.	Absolute Grains of Vapor in a cubic foot of Air, a	Weight in Troy Ounces of Vapor in- haled by one person in 24 hours. b	Weight in Troy Ounces of Vapor ex- haled from air passages in 24 hours in excess of vapor inhaled, c	Day,—7 a. m. to 2 p. m.	Night, -9 p. m. to 7 a. m.	Average Velocity of Wind,—Miles per by Registering Anemometer,	Average Pressure of Atmosphere (Barometer Re- fuced to 32° Fahr.)
Num clu log	aber of Stations in-) aded in Meteoro- gical Averages)	4478	100.00	15	13	9	9	9	9	9	9	7	12
Ιά.	December	66	13.95	11.28	30.73	83	1.92	1,20	10.48	4,57	5.05	12.0	29.143
aths	January	51	10.78	15.28	15.93	90	1.25	.78	10.90	3,52	3,85	10.2	29.278
More than the Av. No. of Deaths,	October	50	10.57	14.58	e46.01	76	3.05	1.91	9.77	4.33	4.31	10.1	29.070
No. o	November	42	8.88	13.47	38.73	79	2.49	1.56	10.12	3.61	3.61	10.2	29.202
Mon	May	41	8.67	18.04	e53.40	71	3.69	f2,31	9.37	5.57	5.58	9.1	29.065
Aver	age	39	8.33	17.42	45.03	77	3.31	2.07	9.61	4.20	4.29	9.8	29.158
	(March	38	8.03	17.73	e25.89	84	1.67	f1.04	10.64	4.03	4,27	11.4	29.203
ge N	April	38	8.03	18.70	e42.81	69	2.55	f1.59	10.09	4.75	4.98	10.6	29.250
vera	August	34	7.19	20,21	68,05	72	5.59	3,49	8.19	8.77	3.73	8.6	29.144
Less than the Average No. of Deaths.	July	32	6.77	20.68	70.95	71	5.95	3.72	7.96	3.15	3.04	7.3	29.166
00	September	32	6.77	20.33	58,20	74	4.30	2.69	8.99	4.40	4.07	8.8	29.174
s th	February	31	6.55	17.70	e21.65	87	1.51	f .94	10.74	3.65	8.97	10.1	29.129
Fee	June	18	3.81	21.11	68.03	70	5.71	3.57	8.11	5.06	5.09	8.6	29.069

Diphtheria.—This greatly dreaded disease caused the death of 717 persons in 1888. This number is 218 less than that reported in 1887 and is the smallest number returned since 1877. The average annual number returned for the twelve years, 1877-1888, was 1,156, and the number for each of these years is as follows:

a Calculated from readings of Dry Bulb and Wet Bulb thermometers.

b Calculated for 18 respirations per minute of 20 cubic inches of air each.

c Assuming the air exhaled to be saturated with vapor at the temperature of 98° F., each cubic foot containing 18.69 grains, 18 respirations per minute, of 20 cubic inches of air each, making 11.68 Troy ounces of vapor exhaled daily. No correction made for expansion of air after being inhaled.

d Includes 90 deaths from Membranous Croup, and excluding 1 death in unknown month.

e Exceptions to the proposition that more than an average number of deaths from croup occurred in months when the Average Daily Temperature was less than the average, and vice versa.

f Exceptions to the proposition that more than the average number of deaths from croup occurred in months when there was less than the average quantity of vapor inhaled, and vice versa.

1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.
598	887	1,473	1,542	2,063	1,416	1,007	1,065	1,054	1,117	985	717

The above table, giving the number of deaths from diphtheria annually since 1877, presents a good view of the periodicity of the epidemic influence which governs its activity. The steady increase in the number of deaths from diphtheria from 1877 to 1881 may here be observed as well as the gradual decline in the years since 1881.

In 1888 there were more deaths from diphtheria among males than among females, the same as in 1887, but the order is usually the reverse of this, with the females showing the largest number. The excess among the males in 1888 was 23.

The disease was most prevelent toward the end of the year, as appears from table 88. The months of October, November and December contributed 35.98 per cent of the deaths, the month of October leading with 94 deaths, or 13.11 per cent.

Over 80 per cent of the deaths from diphtheria in 1888 were those of children under ten years of age. Knowing, as we do by the census, the age-distribution in the population, we can determine the special death-rate from diphtheria at different ages.

According to the census of 1884 there were 225,973 children in Michigan under five years of age, and there were 356 deaths from diphtheria under that age. These numbers will give a mortality-rate of 1.58 per thousand. For ages under ten years the death-rate was 1.31 per thousand.

The following tabulated exhibit shows the relative prevalence of diphtheria, in 1888, in each of the eleven geographical divisions of the State. The two divisions having the highest and lowest per cent, respectively, were the southeastern and central divisions:

State and Geographical Divisions.	Total Mortality from all Causes.	Deaths from Diphtheria.	Per Cent of Deaths from Diphtheria to Deaths from all Causes.
State	21,764	717	3.29
Upper Peninsular	1,758	98	5.31
Northwestern	610	10	1.64
Northern	391	11	2.81
Northeastern	36 8	• 11	2.99
Western	2,165	42	1.94
Northern Central	686	10	1.46
Eastern	2,959	80	2.70
Central	2,347	30	1.28
Southwestern	1,273	87	2.91
Southern Central	2,885	69	2.89
Southeastern	6,327	824	5.12

Table 88 shows the number of deaths from diphtheria in 1888, by months, with certain coincident meteorological conditions. It will be observed that there were but three exceptions this year to the proposition that *more* than the average number of deaths from diphtheria occured in months in which the temperature was *less* than the average, and *vice versa*.

TABLE 88.—Deaths returned from Diphtheria in Michigan, by Months, during the Year 1888, and some Coincident Meteorological Conditions, at Representative Stations in Michigan during the same Year and Months.

		Deaths Diphti 188	heria.	Tempera Degrees		Humid M	ity of A fonthly	tmosph Averag	ere, etc., ge.	Ozon Relat Maxin =1	ive num	- pour,-	(Barometer
by N	onths in Order umber of Deaths om Diphtheria, Greatest first.	Number.	Per cent of Total.	Average Daily Range by Registering Thermometer,	Average of Three Daily Observations.	Relative Per cent of Saturation.	Absolute Grains of Vapor in a cubic foot of Air, a	Weight in Troy Ounces of Vapor Inhaled by one person in 24 hours.	Weight in Troy Ounces of Vapor Exhaled from air passages in 24 hours in excess of Vapor inhaled, a	Day,—7 a, m, to 2 p, m.	Night,—9 p. m, to 7 a. m.	Average Velocity of wind,—miles per hour, by Registering anemometer.	Average Pressure of Atmosphère, (E Reduced to 32° Fahr.)
Number clud	fumber of Stations in- cluded in Meteorolo- gical Averages		100,00	15	13	9	9	9	9	9	9	7	12
More than the average No. of deaths.	October	94	13.11	14.58	646.01	76	3.05	1.91	9.77	4.33	4.31	10,1	29.070
the	December	91	12.69	11.28	30.73	83	1.92	1.20	10.48	4.57	5.05	12.0	29.143
ath.	November	73	10.18	13.47	38.73	79	2.49	1.56	10.12	3.61	3.61	10.2	29.202
ret de	March	64	8,93	17.78	25.89	84	1.67	1.04	10.64	4.03	4.27	11.4	29,203
We W	February	61	8.51	17.70	21.65	87	1.51	.94	10.74	3.65	3.97	10.1	29.129
Avera	ge	60	8.33	17.42	45.03	77	3,31	2.07	9.61	4.20	4.29	9.8	29,158
	June	59	8.23	21.11	68.03	70	5.71	3.57	8.11	5.06	5.09	8.6	29.069
Tag.	August	55	7.67	20.21	68.05	72	5.59	3.49	8.19	3.77	8.78	8.6	29.144
ave	January	50	6.97	15.28	ь15.93	90	1.25	c.78	10.90	3.52	3.85	10.2	29.278
Less than the average No. of deaths.	April	49	6.83	18.70	b42.81	69	2.55	c1.59	10.09	4.75	4.98	10.6	29.250
o.o	May	42	5.86	18.04	53.40	71	3.69	2.31	9.37	5.57	5.58	9.1	29.065
N	July	40	5.58	20.68	70.95	71	5.95	3.72	7.96	3.15	3.04	7.3	29.166
Н	September	89	5.44	20.33	58.20	74	4.30	2.69	8.99	4.40	4.07	8.8	29.174

a See foot-notes to Table 87, page 224.
b Exceptions to the proposition that more than an average number of deaths from Diphtheria occurred in months when the Average Daily Temperature was less than the average, and vice versa.
c Exceptions to the proposition that more than an average number of deaths from Diphtheria occurred in months when less than the average quantity of vapor was inhaled, and vice versa.

Typhoid Fever—There were 638 deaths from this disease in 1888, 132 less than the number returned in 1887, but 140 more than were reported in 1886, and 119 more than the annual average for the ten years, 1878–1887. The percentage of deaths from typhoid fever to deaths from all causes in 1888 was 2.93, which was 1.02 per cent less than in 1887.

There were 353, or 55 per cent of deaths among males, and 285, or 45 per cent among females, and each year, except 1879, the mortality among the males exceeds that among the females, the average per cent of difference being eight.

A little more than half of the mortality, 57.61 per cent, occurred in the months of August, September, October and November, and more than a third of the deaths, 36.42 per cent, occurred in September and October. Usually, September is the month of

greatest mortality, but in 1888, October leads with 134, or 21.04 per cent of the total deaths. The propriety of calling the disease "autumnal fever" is thus well illustrated. About 38 per cent of the deaths from typhoid fever, in 1888, were of persons between 15 and 30 years of age, and more than 27 per cent were between 15 and 25 years old. Table 89 shows the relation of deaths from typhoid fever to certain atmospheric conditions during the year 1888.

TABLE 89.—Deaths returned in Michigan from Typhoid Fever, by Months, during the Year 1888, and some Coincident Meteorological Conditions, at representative stations in Michigan during the same year and months.

	V-0-1-04	Death: Typi Fever,	boid	Temper Degrees		Hum etc.	nidity of —Mont	Atmos hly Ave	sphere, rages,	Maxi	ne,— ative mum 10.	hour,-by	(Barometer re-
by :	Months in Order by number of Deaths from Typhoid Fever, greatest first. Number of Stations in cluded in Meteorological Averages.		Per cent of total.	Average daily range by registering thermometer.	Average of three daily observations,	Relative per cent of saturation.	Absolute grains of vapor in a cubic foot of air,a	Weight in Troy ounces of vapor in- haled by one person in 24 hours.a	Weight in Troy ounces of vapor exhaled from air passages in 24 hours in excess of vapor inhaled,*	Day,-7 a, m, to 2 p, m,	Night, -9 p. m. to 7 a. m.	Average velocity of wind,miles per registering anemometer,	Average pressure of atmosphere, (Haducced to 32° Fuhr.)
clu	cluded in Meteorolo- gical Averages		100,00	15	13	9	9	9	9	9	9	7	12
Av.	October	134	21.04	ь 14.58	46.01	76	d 3,05	1.91	9.77	e 4.33	e 4.31	10.1	f 29.070
than the A	September	98	15.38	20,33	58.20	74	4.30	2.69	8.99	e 4.40	4.07	8.8	29.174
than the of Death	November	73	11.46	b 13.47	c 38.73	79	d 2.49	1.56	10.12	3.61	3.61	10.2	29.202
	August	62	9.73	20.21	68.05	72	5.59	3.49	8.19	3.77	3.73	8.6	f 29.144
More No.	December	59	9.26	ь 11.28	c 30.73	83	d 1.92	1.20	10.48	e 4.57	e 5.05	12.0	f 29.148
Aver	age	53	8.33	17.42	45.03	77	3.31	2.07	9.61	4.20	4.29	9.8	29.158
No.	(April	42	6.59	ь 18.70	42,81	69	2.55	1.59	10.09	4.75	4.98	10.6	r 29.250
Se N	March	36	5.65	b 17.73	25.89	84	1.67	1.04	10.64	e 4.03	e 4.27	11.4	f 29.203
vera	February	31	4.87	ь 17.70	21.65	87	1.51	.94	10.74	e 3.65	e 3.97	10.1	29.129
the average	May	28	4.40	ь 18.04	c 53.40	71	d 3.69	2.31	9.37	5.57	5.53	9.1	29.065
than th	July	28	4.40	b 20.68	c 70.95	71	d 5.95	3.72	7.96	e 3.15	e 3,04	7.3	f 29,166
th	January	27	4.24	15,28	15.93	90	1.25	.78	10.90	e 3.52	e 3.85	10.2	f 29.278
Less	June	19	2.98	b 21.11	c68.03	70	a 5.71	3.57	8.11	5.06	5.09	8.6	29.069

<sup>See foot-notes to Table 87, page 224.
Exceptions to the proposition that the Average Daily Range of Temperature was greater than the average in months when more than the average number of deaths occurred, and vice versa.
Exceptions to the proposition that the Average Daily Temperature was greater than the average in months when more than the average number of deaths occurred, and vice versa.
Exceptions to the proposition that the Absolute Humidity was greater than the average in months when more than the average number of deaths occurred, and vice versa.
Exceptions to the proposition that the Ozone was less than the average in months when more than the average number of deaths occurred, and vice versa.
Exceptions to the proposition that the Atmospheric Pressure indicated by the Barometer was greater than the average in months when more than the average number of deaths occurred, and vice versa.
Excluding 1 death in unknown month.</sup>

Diarrheal Diseases—The number of deaths from this class of diseases for each of the years, 1877–1888, may be seen in Table 90. In 1888, there were 114 more deaths than were returned in 1887 and 376 more than the average for the twelve years, 1877–1888. The increase over that for 1887 is mainly due to cholera infantum, while diarrhea and dysentery show a decrease from the number reported in 1887, the former of 43 and the latter of 30. The sum of this group of diseases, 1,733, was about 8 per cent of the total mortality from all causes, the same as in 1887.

TABLE 90.—Deaths returned from Diarrheal Diseases in Michigan during the Years 1877-1888, and the Average.

Years.	Diarrhea,	Dysentery.	Cholers Infantum.	Cholera Morbus,	Enteritis.	Diarrheal Discases.
1877	290	218	8 70	41	226	1,145
1878	178	158	243	27	214	815
1879	226	135	300	36	237	934
1880	810	160	499	64	267	1,300
1881	501	270	857	86	842	2,056
1882	259	96	428	50	276	1,109
1888	267	114	465	27	294	1,167
1884	409	160	781	50	850	1,750
1885	261	105	360	42	324	1,092
1886	878	158	653	42	827	1,558
1887	414	183	626	57	889	1,619
1888	871	158	767	52	390	1,788
Average	322	159	529	48	299	1,857

Cholera Infantum—The returns for 1888 show a decided increase in the mortality from this disease, there being 767 deaths as compared with 626 in 1887. The annual average of mortality for the twelve years, 1877–1888, was 529, which is 238 less than that reported for 1888. The mortality from cholera infantum in 1888 comprised 3.52 per cent of the total deaths from all causes.

Deaths were recorded in every month, but the months of July, August and September contributed 561, or 73.14 per cent of the total deaths, the month of August standing at the head with 271, or 35.33 per cent of the deaths to its account. The third quarter of the year has always been the season of greatest mortality in Michigan, and August is usually the most unfavorable of all the months.

As compared with the population living under five years of age, according to the census of 1884, the ratio of mortality from cholera infantum in 1888 was 3.4 per thousand. There were 410 deaths among males from this cause and 357 among females.

TABLE 91.—Deaths returned in Michigan from Diarrhea, by Months, during the Year 1888, and some Coincident Meteorological Conditions.

			s from rhea, 88.	Temper Degre Fah	ees	Н		idity of e Ionthly	tc.,	21.00	Ozone, ative mum		hour,—by	rometer re-
by N	onths in Order umber of Deaths rom Diarrhea, greatest first.	Number.	Per cent of total.	Average dally range by registering thermometers,	Average of three daily observations.	Relative ner cent of saturation	remarks for come or carmanon.	Absolute grains of vapor in a cubic foot of air, a	Weight in Troy ounces of vapor in- haled by one person in 24 hours. a	Weight of Troy ounces of vapor exhaled from air passages in 24 hours in excess of vapor inhaled, a	Day,—7 A. M. to 2 P. M.	Night,-9 P. M. to 7 A. M.	Average velocity of wind,—miles per registering anemometer.	Average pressure of atmosphere, (Barometer reduced to 32° Fahr.)
	er of Stations included eorological Averages	371	100.00	15	13		9	9	9	9	9	9	7	12
Av. No. of Deaths.	August	98 85 76	26.41 22.91 20.49 8.33	20.21 20.68 20.33	68.05 70.95 58.20 45.03		72 71 74 77	5.59 5.95 4.30 3.31	3.49 3.72 2.69 2.07	8.19 7.96 8.99 9.61	3.77 3.15 f 4.40 4.20	3.73 3.04 4.07 4.29	8.6 7.3 8.8 9.8	g 29.144 29.166 29.174 29.158
3100	June	28	7.55	b 21.11	c68.03	d	70	e 5.71	3.57	8.11	5.06	5.09	8.6	29.069
100	October	28		100	c46.01		76	272539	1.91	9.77	4.33	f 4.31	10.1	29.070
	November	14	3.77	13.47	38.73		79	2.49	1.56	10.12	1,000	f 3.61	10.2	
hs.	December	13		11.28	1		83	1.92	1.20	10.48	4.57	5.05	12.0	29.148
Dead	May	11	2.96	b 18.04	c53.40	d	71	e 3,69	2,31	9.37	5.57	5.58	9.1	29.065
o e	April	9	2.43	b 18.70	42.81	d	69	2.55	1.59	10.09	4.75	4.98	10.6	g 29.250
Less than the Average Number of Deaths.	March	7	1.89	ь 17.73	25,89	17	84	1.67	1.04	10.64	f 4.03	f 4.27	11.4	g 29.203
	January	4	1.08	15.28	15.93		90	1.25	.78	10.90	f 3.52	f 3,85	10.2	g 29.278
	February	3	.81	ь 17.70	21.65		87	1.51	.94	10.74	f 3.65	f 3.97	10.1	29.129

a See foot-notes to Table 87, page 224.

b Exceptions to the proposition that more than the average number of deaths from Diarrhea occurred in months when the Average Daily Range of Temperature was greater than the Average, and vice versa.

c Exceptions to the proposition that more than the average number of deaths from Diarrhea occurred in months when the average Daily Temperature was higher than the average, and vice versa.

d Exceptions to the proposition that more than the average number of deaths from Diarrhea occurred in months when the Relative Humidity of the Atmosphere was less than the average, and vice versa.

e Exceptions to the proposition that more than the average number of deaths from Diarrhea occurred in months when the Absolute Humidity of the Atmosphere was greater than the average, and vice versa.

f Exceptions to the proposition that more than the average number of deaths from Diarrhea occurred in months when the amount of Ozone in the Atmosphere was less than the average, and vice versa.

g Exceptions to the proposition that more than the average number of Deaths from Diarrhea occurred in months when the Average Daily pressure of the Atmosphere was greater than the average, and vice versa.

Diarrhea—The number of deaths from this cause in 1888 was 371, a decrease of 43 from the mortality in 1887, but 49 more than the average for the twelve years, 1877–1888. The ratio of deaths to the total mortality was 1.70, as compared with 2.13 per cent in 1887, 2.08 in 1886, 1.57 in 1885, and 2.27 in 1884.

There were 206, or 55.53 per cent of the deaths among males and 165, or 44.47 per cent of the deaths among females. More than two-thirds of the deaths occurred in the three months of July, August and September and more than one-fourth of the total mortality was recorded in August.

As may be seen from Table 83, more than five-sixths of the deaths were those of children under five years old. As compared with the population living under five years of age, according to the census of 1884, the ratio of mortality from diarrhea in 1888 was 15 per 10,000, or 667 children living under five years old to every death under that age.

Table 91 shows the relation which the deaths from diarrhea sustained to certain atmospheric conditions in 1888.

Dysentery.—The number of deaths from dysentery in 1888 was 153, which was 30 less than that of 1887 and 6 less than the average for the twelve years, 1877–1888. Eightyone per cent of the mortality was in the four months of July, August, September and October, August alone having a record of 29.42 per cent. Sixty-two per cent of the deaths were those of children under five years old, and 23 per cent were of persons over fifty years of age.

As compared with the population living at the extremes of infancy and old age, or children under five years of age and persons 80 years and over, the ratio of mortality from dysentery in 1888 was as follows: for those under 5, the ratio was 4.20 per 10,000, for those 80 and over, the ratio was 14.30 per 10,000. From this it appears that the relative mortality from this disease is greater for aged persons than for young children.

Scarlet Fever.—The number of deaths returned from scarlet fever in 1888 was 323, which was five more than that of 1887, four more than that of 1886 and also more than that of any year since 1884. The years having the largest number of deaths from scarlet fever were 1870 with 852, 1871 with 696, and 1883 with 673. The average annual number for the 18 years, 1870–1887, was 468.

The ratio of mortality from scarlet fever to the deaths from all causes was 1.48 percent, which was less than that of 1887, 1886, 1884, and 1883, but greater than that for 1885.

The deaths were quite uniformly distributed throughout the different months of 1888, the months of April, March and December leading with nearly a third of the deaths to their credit.

The very great degree to which the disease selects its victims from among young children is again illustrated in the 63 per cent of all the deaths in 1888 being those of children under five years of age, and 88 per cent, those of children under ten years of age.

As compared with the number of children living under the ages of five and ten years the ratios were as follows: for children under 5 years of age, 9.1 per 10,000, for those between the ages of 5 and 10 years, 3.7 per 10,000, while for all children under 10 years, the ratio was 6.4 per 10,000.

In 1888 there were only three exceptions to the proposition that the average daily temperature was *lower* than the average in months in which *more* than the average number of deaths from scarlet fever occurred, and *vice versa*.

TABLE 92.—Deaths returned in Michigan from Scarlet Fever, by Months, during the Year 1888, and some Coincident Meteorological Conditions, at Representative Stations in Michigan during the same year and months.

1		Scarl	ths from et Fever, 1888.	Deg	erature, rrees hr.		midity e., Mon		osphere, erages,	Ozor Rela Maxi =1	tive	hour,-by	(Barometer
by	Months in Order Number of Deaths from Scarlet ever, greatest first,	Number,	Per cent of total,	Average daily range by registering thermometers.	Average of three daily observations.	Relative per cent of saturation.	Absolute grains of vapor in a cubic foot of air, a	Weight in Troy ounces of vapor in- haled by one person in 24 hours, a	Weight in Troy ounces of vapor exhaled from air passages in 24 hours in excess of vapor inhaled, a	Day,-7 a. m. to 2 p. m.	Night,-9 p. m. to 7 a. m.	Average velocity of wind,—miles per registering anemometer.	Average pressure of atmosphere, reduced to 32° Fahr.)
Num elu gio	umber of Stations in- cluded in Meteorolo- gical Averages		100.00	15	13	9	9	. 9	9	9	9	7	12
96 be.	April	35	10.84	18.70	42.81	69	2.55	1.59	10.09	4.75	4.98	10.6	29,250
More than the Av. No. of D'ths.	March	38	10.22	17.73	25.89	84	1.67	1.04	10.64	4.03	4.27	11.4	29,203
tha.	December	33	10.21	11.28	30,73	83	1.92	1.20	10.48	4.57	5.05	12.0	29.143
No	September	30	9.29	20.33	b 58.20	74	c4.30	2.69	8.99	4.40	4.07	8.8	29.174
Av.	November	30	9.29	13.47	38.73	79	2.49	1.56	10.12	3.61	3,61	10.2	29.202
Aver	age	27	8.33	17.42	45.03	77	3,31	2.07	9.61	4.20	4,29	9,8	29.158
0	October	26	8.05	14.58	46.01	76	c 3.05	1.91	9.77	4.33	4.81	10.1	29.070
the Average No. Deaths.	January	25	7.74	15,28	b 15.98	90	c 1,25	.78	10,90	3.52	3.85	10.2	29,278
vera	June		7.74	21.11	68.08	70	5.71	8.57	8.11	5.06	5.09	8.6	29.069
eath	July	25	7.74	20.68	70.95	71	5.95	3.72	7.96	3.15	3.04	7.8	29,166
than the Aver of Deaths.	February	21	6.50	17.70	b 21.65	87	c1.51	.94	10.74	3,65	3,97	10.1	29.129
th	May	0.5	6.19	18.04	53,40	71	3.69	2.31	9.37	5.57	5.58	9.1	29.065
Less	August	20	6.19	20.21	68.05	72	5,59	3.49	8,19	3.77	3.73	8.6	29,144

a See foot-notes to Table 87, page 224.
b Exceptions to the proposition that the Average Daily Temperature was lower than the average in months when more than the average number of deaths from Scarlet Fever occurred, and vice versa.
c Exceptions to the proposition that the Absolute Humidity of the atmosphere was less than the average in months when more than the average number of deaths from Scarlet Fever occurred, and vice versa.

Consumption—This expressive word, representing the group of wasting pulmonary diseases, still maintains its conspicuous place at the head of the list of causes of death in Michigan. In 1888, consumption was returned as the cause of 2,424 deaths, a number 297 greater than was attributed to this cause in 1887. The average annual mortality from this disease for the 20 years, 1869–1888, was 1,734. This average is 36 more than was given for the 19 years in the report for 1887.

Of the 2,424 deaths from consumption in 1888, 1,103 were males and 1,321 were females, or there were 84 male decedents to 100 female decedents. For the 20 years from 1869 to 1888, inclusive, the total number of deaths returned from consumption in Michigan was 34,688, of which 16,067 were males and 18,621 were females. This gives 86 male decedents to each 100 female decedents for the aggregate of these years, or 46 males and 54 females in each 100 decedents. The ratio of deaths of females to males from this cause is larger even than the numbers mentioned represent, because of the excess of the male over the female population in Michigan. In-door occupation, and the absence of the excess of deaths among the females.

The following tabular exhibits show the influence which the different months and seasons have in promoting the fatality of consumption. In 1888 the largest number of deaths occurred in March, a month which has repeatedly had the same fact recorded concerning it in former years. The month of April very frequently has the largest mortality from this disease, which is no doubt due to its changeable temperature and its dampness, which is also true in regard to the month of March. For the twenty years, the highest monthly mortality appears for April and December, and the lowest for January and February. The highest quarterly mortality was in the second corresponding to the record for a single year.

The comparison, with reference to ages, shows that the mortality from consumption bears most heavily upon the middle-aged and those past the prime of life. In 1888, over 25 per cent of the deaths were of persons between 20 and 30 years of age, and more than 26 per cent of the deaths occurred between the same ages for the twenty-year record. There appears but little difference in the relative proportion of the various periods of life between the aggregate record and that for a single year. As compared with the living population the death-rate from consumption is seen to be highest at ages between 60 to 80.

It will be interesting to note the comparative mortality from consumption to the living population at the time of the next census. We should like to know whether there has been an improvement as regards the destructiveness of the disease in recent years. The death-rate from consumption in 1880 was 11.3 per 10,000, of the living population and in 1884, it was 11.9 per 10,000.

Table 93 shows the relation of the deaths from consumption in 1888 to certain atmospheric conditions.

Months.	Jan.	Feb.	Mar,	Apr.	Мау.	June.	July,	Aug.	Sept.	Oct.	Nov.	Dec.	Unk.
	167	184	241	222	236	166	201	214	198	204	211	177	. 8
Quarters		7,592			624			608			592		8
Per cent		24.42			25.75			25.08			24.42		.33

Mortality from Consumption by Months and Quarters, 1888.

Total Mortality from Consumption, by Sex, Months, and Age, 1869-1888.

20.1	Se	x.							M	onths						
	Males.	Females.	Totals,	January.	February.	March.	April,	May.	June,	July,	August,	September.	October,	November.	December.	Unknown.
Males	16,067			972	1,102	1,481	1,514	1,502	1,271	1,287	1,339	1,401	1,313	1,333	1,499	58
Females		18,621	34,688	1,093 2,065	1,293 2,395	1,601 3,082	1	1,698 3,200	1	E-VICE 2	1,604 2,943		1,584 2,897	1,522 2,855	1,721 3,220	73 126
Quarters					7,542 21.74			9,185 26.48			8,863 25,56			8,972 25.86		126
								A	ges.							=
		Under 5.	5 to 10.	10 to 15		15 to 20.	20 to 30.	80 to 40.		40 to 50.	50 to 60.	60 to 70.	70 to 80.		80 and over.	Unknown,
Males		1,153	1165		234	965 2,176	3,696 5,435	1100	2 12	,091	1,838 1,471	1,75	115	11 54	185 148	259
Totals	24453	2,252	1	2011	786 :	9.06	9,131	1	1	,100 1.82	3,309 9,54	2,958	1 65	65	333 .96	529

Mortality from Consumption, by Sex, and Ages, 1888.

Ages.	Deaths from all Causes,	Deaths from Com- sumption,	Per cent at Several Ages,	Males.	Females.	Per cent of Deaths from Con- sumption to Popula- tion.
Under 10	9,361	177	7.30	82	95	.040
10 to 20	1,897	800	12.38	92	208	.079
20 to 80	1,854	621	25.62	266	855	.176
80 to 40	1,474	450	18.56	200	250	.176
40 to 50	1,338	293	12.09	155	138	.160
50 to 60	1,364	215	8.87	108	107	.173
60 to 70	1,798	200	8.25	108	92	.271
70 to 80	1,896	111	4.58	58	53	.361
80 and over	1,042	29	1.20	16	13	.377
Age not stated.	305	28	1.15	18	10	1.691
Totals	21,764	2,424	100.00	1,108	1,821	.131

TABLE 93.—Consumption.—Deaths from Consumption returned in Michigan, by Months, during the Year 1888, and some Coincident Meteorological Conditions, at Representative Stations in Michigan during the same year and months.

		Deaths Const tion,	ımp-	Temper Degr Fal	ees	Hum	idity of Month	Ata ly A	mosph Averag	ere, etc., es.	Ozone,- tive M mum	laxi-	hour,—by	(Barometer re-
D	Months in Order by Number of Deaths from Con- sumption, greatest first. o. Stations included in { feteorological Av'r's's {		Per cent of total.	Average daily range by registering thermometers.	Average of three dally observations,	Relative per cent of saturation.	Absolute grains of vapor in a cubic foot of air, a	and seemed	Weignt in troy ounces of vapor in- haled by one person in 24 hours, a	Weight in Troy ounces of vapor ex- haled from air passages in 24 hours in excess of vapor inhaled, a	12y,-7 A, M, to 2 P, M.	Night, -9 P. M to 7 A. M.	Average velocity of wind,—miles per registering anemometers,	Average pressure of atmosphere. (Barduced to 32° Fahr.)
No. S Mete	tations included in } corological Av'r'g's }	b2,416	100.00	15	1	9	9		9	9	9	9	7	12
250	March	241	9.97	17.73	e 25.8	84	1.67	d	1.04	10.64	4.03	4.27	11.4	29.208
More than the Average No. of Deaths.	May	236	9.77	18.04	53,4	71	3.69		2.31	9.37	5.57	5.53	9.1	29.065
Deat	April	222	9.19	18.70	c 42.8	1 69	2.55	d	1.59	10.09	4.75	4.98	10.6	29.250
of B	August	214	8.86	20.21	68.0	72	5.59		3.49	8.19	3.77	3.73	8.6	29.144
ž	November	211	8.73	13.47	e 38.7	79	2.49	d	1.56	10.12	3.61	3.61	10.2	29.202
Mo	October	204	8.44	14.58	46.0	1 78	3.05	a	1.91	9.77	4.33	4.31	10.1	29.070
Aver	age	201	8.33	17.42	45.0	3 77	3.31		2.07	9.61	4.20	4.29	9.8	29.158
80	July	201	8,32	20.68	c 70.9	5 71	5.95	d	3.72	7.96	3.15	3.04	7.8	29.166
Average ths.	September	193	7.99	20.33	c 58.2	0 74	4.30	đ	2.69	8.99	4.40	4.07	8.8	29.174
thau the Aver No. of Deaths,	February	184	7.62	17.70	21.6	5 87	1.51		.94	10.74	3.65	3.97	10.1	29.129
thau the No. of Dea	December	177	7.33	11.28	80.7	3 83	1.92		1.20	10.48	4.57	5.05	12.0	29.14
No	January	167	6.91	15.28	15.9	3 90	1.25		.78	10.90	3.52	3.85	10.2	29.27
Less	June	166	6.87	21.11	c 68.0	3 70	5.71	đ	3.57	8.11	5.06	5.09	8.6	29.069

Pneumonia—This disease was returned as the cause of 1,190 deaths in 1888. This number is larger by 306 than that reported in 1887, and is the largest number ever reported in the State. The average annual number of deaths from this cause for the twenty years, 1869-1888, was 692, while the average for the ten years, 1879-1888, was 815. The percentage of deaths from pneumonia to deaths from all causes, in 1888, was 5.47, while the average percentage for the twenty years 1869-1888, was 4.66.

Each year there are more deaths returned among males than among females, the

a See foot-notes to Table 87, page 224.
b Excluding 8 deaths in unknown months.
c Exceptions to the proposition that the Average Daily Temperature was higher than the average in months when more than the average number of deaths from Consumption occurred, and vice versa.
d Exceptions to the proposition that more than the average amount of vapor was inhaled in months in which there was more than the average number of deaths from Consumption, and vice versa.

figures, in 1888, being 654 males and 536 females, or an excess of 118 male decedents. In this respect the disease is the reverse of consumption.

In 1888, February and March were the two most fatal months, but for the average for ten years March and April show the greatest number of deaths. Nearly one-half the deaths are returned in the first four months of the year. The difference between the mortality of the first six months and the last six months of 1888 was quite marked being 361.

As regards age, 442 of the whole number, or 37.14 per cent, occurred in 1888 under the age of five years, as compared with 348, or 39.25 per cent in 1887, and 326, or 41.63 per cent in 1886. Three hundred and seventy-seven, or 31.68 per cent of the deaths from pneumonia, were of persons over 50 years of age.

The ratio of mortality from pneumonia in 1888 to population living at the same age was as follows: for those under 5 years of age, 19.6 to every 10,000, for those aged 5 to 50 the rate was 2.5 per 10,000, while for those aged 50 and over it was 15.9 to every ten thousand.

Thus it is seen that while pneumonia attacks all ages, its fatality is greatest at the extremes of life when the strength and vitality of its victims are less able to withstand the disease.

Table 95 shows the relation of deaths from pneumonia to certain atmospheric conditions in 1888. It appears that there were only three exceptions to the proposition that the Average Daily Temperature was *lower* than the average in months in which *more* than the average number of deaths from pneumonia occurred and *vice versa*.

TABLE 94.—By Months, the number of deaths returned from Pneumonia in Michigan during each of the Years 1879–1888, and the average for ten years ending with 1888.

				Dea	ths fr	rom l	Pneu	mon	ia, 18	79-1	888.			
Years.	Totals.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
1879	701	44	92	114	102	59	36	30	31	42	25	45	80	1
1880	812	56	82	111	113	79	37	29	36	51	44	68	105	1
1881	805	77	88	126	100	70	37	39	29	47	55	43	91	3
1882	735	59	65	-84	82	94	58	29	29	36	43	57	97	2
1883	737	76	61	97	104	89	40	30	42	27	41	58	76	1
1884	767	68	101	106	83	67	39	34	42	34	30	70	90	3
1885	733	65	100	122	86	66	34	26	26	41	45	43	78	1
1886	783	57	62	113	100	63	48	32	28	36	46	76	121	1
1887	884	87	112	122	113	75	44	28	36	52	64	66	84	1
1888	1,190	96	153	181	143	128	74	36	37	68	68	74	131	1
Average for 10 Years	815	68	92	118	103	79	45	31	34	43	46	59	95	2

TABLE 95.—Deaths returned from Pneumonia in Michigan during the Year 1888, and some Coincident Meteorological Conditions at Representative Stations in Michigan during the same year and months.

Months in Order by Number of Deaths from Pneumonia, greatest first.		Pneumonia, D		Des	erature, grees ahr.	Hum	idity of Monthi	Atmosph y Averag	ere, etc., es.	Ozone,— Relative Maximum =10,		hour,-by	(Barometer
		Number, Per cent of total, Average daily range by registering thermometers,		Average of three dally observations.	Relative per cent of saturation,	Absolute grains of vapor in a cubic foot of air, a	Weight in Troy ounces of vapor in- haled by one person in 24 hours, a	Weight in Troy ounces of vapor exhaled from air passages in 24 hours. In excess of vapor inhaled, a	Day, -7 a, m, to 2 p, m,	Night, -9 p. m, to 7 a, m,	Average velocity of wind,miles per registering anemometer.	Average pressure of atmosphere. (reduced to 32° Fahr.)	
clu	Number of Stations in- cluded in Meteorolo- gical Averages		100.00	15	18	9	9	9	9	9	9	7	12
hs.	March	181	15.22	17.78	25.89	84	1.67	1.04	10.64	4.03	4.27	11.4	29,208
D.t	February	153	12.87	17.70	21.65	87	1.51	.94	10.74	3.65	3.97	10.1	29.129
of	April	143	12.03	18.70	42.81	69	2.55	1,59	10.09	4.75	4.98	10.6	29.250
Av. No. of D'ths.	December	131	11.02	11,28	30.73	83	1.92	1.20	10.48	4.57	5.05	12.0	29,148
	May	128	10.77	18.04	b 53.40	71	3.69	c 2.81	9.37	5.57	5.53	9.1	29,065
Average		99	8.33	17.42	45.03	77	3.31	2.07	9.61	4.20	4.29	9.8	29.158
Less than the Average No. of Deaths.	January	96	8.07	15.28	b 15.93	90	1.25	c .78	10.90	3,52	3,85	10.2	29.278
	November	74	6.22	13.47	b 38.78	79	2.49	c 1.56	10.12	3.61	3.61	10.2	29,202
	June	74	6.22	21.11	68.03	70	5.71	3,57	8.11	5,06	5.09	8.6	29.069
	September	68	5.72	20.33	58.20	74	4.30	2.69	8.99	4.40	4.07	8.8	29.174
	October	68	5.72	14.58	46.01	76	3.05	c 1.91	9.77	4,33	4.31	10.1	29.070
	August	37	3.11	20.21	68.05	72	5.59	3.49	8.19	8.77	3.73	8.6	29.144
	July	36	3,03	20.68	70.95	71	5.95	3.72	7.96	3.15	3.04	7,3	29,166

^{*} See foot-notes to Table 87, page 224.

b Exceptions to the proposition that the Average Daily Temperature was lower than the average in months when more than the average number of deaths from Pheumouia occurred, and vice versa.

c Exceptions to the proposition that less than the average amount of vapor was inhaled in months when more than the average number of deaths from Pheumonia occurred, and vice versa.

* Excluding 1 death in unknown month.

The relative prevalence, in 1888, of consumption, pneumonia, typhoid fever, scarlet fever, and diarrhea in each of the eleven geographical divisions of the State, may be seen in Table 96. The proportion of deaths from consumption in the northern division seems to have been unusually great in 1888, while in the Upper Peninsula it was less than usual. Pneumonia also shows a low rate per cent in the Upper Peninsula, and its highest rate per cent in the Western division. Typhoid fever seems to have had a very low rate per cent in the southeastern division, while Scarlet fever shows its highest rate in that division. The counties included in each division may be seen in Table 75.

TABLE 96.—Exhibiting for the State and Eleven Geographical Divisions, in 1888, the Number and Per Cent of Deaths returned from all causes, from Consumption, Pneumonia, Typhoid Fever, Scarlet Fever and Diarrhea.

	38, 1888.	Consump-		Pneumonia,		Typhoid Fever,		Scarlet Fever,		Diarrhea,	
State and Geographical Divisions.	Deaths from all causes,	Number of deaths.	Per cent to deaths from all causes,	Number of deaths.	Per cent to deaths from all causes.	Number of deaths.	Per cent to deaths from all causes,	Number of deaths.	Per cent to deaths from all causes.	Number of deaths.	Per cent to deaths from all causes,
State	21,764	2,424	11.14	1,190.	5.47	638	2,93	323	1.48	371	1.70
Upper Peninsular	1,753	115	6.56	65	3.71	87	4.96	30	1.71	56	3.19
Northwestern	610	51	8.36	40	6.56	14	2.30	1	.02	18	2,95
Northern	391	64	16.37	26	6.65	12	3.07	5	1.28	2	.51
Northeastern	368	30	8.15	21	5.71	7	1.90	2	.54	7	1.90
Western	2,165	259	11.96	156	7.21	72	3.33	11	.51	44	2.03
Northern Central	686	79	11.52	42	6.12	26	3.79	9	1.31	5	.73
Eastern	2,959	318	10.75	175	5.91	78	2.64	- 85	1.18	49	1.66
Central	2,847	276	11.76	130	5.54	110	4.69	28	1.19	19	.81
Southwestern	1,273	157	12,33	82	6.44	70	5.50	8	.63	13	1.02
Southern Central	2,885	361	12.51	169	5.86	70	2,43	25	.87	10	.35
Southeastern	6,327	714	11.28	284	4.49	92	1.45	169	2.67	148	2.34

There were 1,174 persons returned in 1888 as having died of "old age," the greater portion of whom were over 70 years of age. Of the decedents returned from this cause, 586 were males and 588 were females. By reference to Table 78 it will be observed that the months having the greatest number of deaths from this class were March and April, and those having the least were June, July and August.

As has been observed in previous reports, deaths from old age and those aged 70 and over occurred in the largest proportion in the older and longer settled portions of the State, while deaths from those aged under 5 had the greatest ratio in the newer portions of the State. Thus, the highest rate per cent of deaths from old age was in the Southern Central division, and the lowest in the Upper Peninsular and North eastern divisions. Deaths of those aged under 5 had the highest rate per cent in the Upper Peninsular and the lowest in the Southern Central.

TABLE 97.—Exhibiting, for the State and Eleven Geographical Divisions, the Number and per cent of Deaths at all Ages, from Old Age, of all aged 70 and over, and of all aged under 5, during the Year 1888.

	œ	Old	Age.	Aged 70	and Over.	Aged u	nder 5.
State and Geographical Divisions.	Deaths at all ages,—1888.	Number of deaths.	Per cent to deaths at all ages by geograph- ical divisions.	Number of deaths,	Per cent to deaths at all ages by geograph- ical divisions,	Number of deaths.	Per cent to deaths at all ages by geograph- ical divisions.
State	21,764	1,174	5.39	2,878	13.22	8,480	38,96
Upper Peninsular	1,758	85	2,00	59	3.37	1,001	57.10
Northwestern	610	30	4.92	57	9.34	282	46,23
Northern.	391	15	3,84	27	6.91	169	43.22
Northeastern	368	5	1.36	17	4.62	214	58.15
Western	2,165	109	5.03	264	12.19	881	40.69
Northern Central	686	25	3.64	56	8.16	285	41,55
Eastern	2,959	140	4.73	312	10.54	1,222	41.30
Central	2,347	129	5.50	425	18.11	624	26.59
Southwestern	1,273	86	6.76	263	20.66	350	27.49
Southern Central	2,885	243	8,42	750	26.00	610	21.14
Southeastern	6,327	857	5.64	648	10.24	2,842	44.92

In Table 98 are given the average ages of all who have died in the State for the years 1886, 1887, 1888, and the average for ten years, 1878–1887. As compared with the figures of 1887, there was a slight decrease in the average age, at death, of all the males, and a slight increase in the average age of the females. It may be seen that the average age of males for the year 1888 was nearly 29 years, and the average age of females nearly a year younger.

The average age of all over 20 years of age was 55 years for males and 52 years for females. Those who died from consumption show an average age of 37 years for males and 33 years for females. The average age of the native-born and also of the foreign-born persons who have died in this State during these years may be seen in the table. There is a great difference between the average age at death, of the native and foreign-born inhabitants, but when the comparison is made between those aged 20 years and over this disparity does not appear.

TABLE 98.—Showing the Average Age of Decedents in Michigan during the Years 1886, 1887, 1888, and the Average for Ten Years, 1878-1887.

Deaths as shown by Registration Returns Deaths of Native-born Inhabitants as shown by Registration Returns Deaths of New Process Section 1988 Sect			Aver	age Age 100ths o	in Years f a Year.	and
Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths as shown by Registration Returns. Deaths as shown by Registration Returns. Deaths as shown by Registration Returns. Deaths as shown by Registration Returns. Deaths of Foreign-born Inhabitants as shown by Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over as shown by Re		Year Ending,	Totals.	Males,	Females	Excess of Males.
pacts of Foreign-born Inhabitants as shown by Registration Returns. Death of Foreign-born Inhabitants as shown by Registration Returns of Deaths from Consumption, by Registration Returns. Death of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants as shown by Registration Returns. Deaths of Foreign-born Inhabitants as shown by Registration Returns. Deaths of Foreign-born Inhabitants as shown by Registration Returns. Deaths of Foreign-born Inhabitants as shown by Registration Returns of Deaths. Deaths of Native-born Inhabitants as shown by Registration Returns of Deaths. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths	Deaths as shown by Registration Returns.] (27.78	28.75	26.88	1.87
Registration Returns Deaths All aged 20 and over whose occupations were stated in Registration Returns of Deaths Dec. 31, 1886 Dec. 31, 1886 50,31 34,04 State Sta	istration Returns.		21.80	22.22	21.36	.86
turns. All aged 20 and over whose occupations were stated in Registration Returns of Deaths. All who died aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths of Foreign-born Inhabitants as shown by Registration Returns. Deaths of Foreign-born Inhabitants as shown by Registration Returns. Deaths of Foreign-born Inhabitants as shown by Registration Returns. Deaths of Foreign-born Inhabitants as shown by Registration Returns. Deaths of Rotaive-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deat	Registration Returns	1.	49.25	50.81	48.47	1.84
11 12 13 14 15 15 15 15 15 15 15	turns	D 04 4000	86.87	39.41	84.04	5.87
1.3 2.2 2.3	in Registration Returns of Deaths	Dec. 31, 1886	51.98	58.62	49.77	3.8
20.00 20.07 28.04 29.07 29.07 29.07 28.04 29.07 29.0	istration Returns.		53.46	55.44	51.31	4.13
29.10 29.07 28,04	over as shown by Registration Returns		52.66	55.02	49.78	5.29
Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths of Foreign-born Inhabitants as shown by Registration Returns of Deaths. All aged 20 and over whose occupations were stated in Registration Returns of Deaths. Death of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths of Foreign-born Inhabitants as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns of Deaths. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants as shown by Registration Returns. Deaths of Foreign-born Inhabitants as shown by Registration Returns. Deaths of Foreign-born Inhabitants as shown by Registration Returns. Deaths of Foreign-born Inhabitants as shown by Registration Returns. Deaths of Foreign-born Inhabitants as shown by Registration Returns. Deaths of Foreign-born Inhabitants as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns of Deaths. All aged 20 and over whose occupations were stated in Registration Returns of Deaths. All aged 20 and over whose occupations were stated in Registration Returns of Deaths. All aged 20 and over whose occupations were stated in Registration Re	Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns	J	53.89	54.67	53.52	1.1
21.82 22.32	Deaths as shown by Registration Returns) (29.10	29.07	28,04	1.0
Dec. 31, 1887 Dec. 31, 1888 Dec. 31, 1889 Dec. 31, 1889 Dec. 31, 1889 Dec. 31, 1889 Dec. 31, 1889 Dec. 31, 1889 Dec. 31, 1887 Dec.	istration Returns.		21.86	21.82	22.32	50
All aged 20 and over whose occupations were stated in Registration Returns of Deaths. 25.70	Registration Returns.		49.74	50,23	49.12	1.1
in Registration Returns of Deaths. All who died aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths of Foreign-born Inhabitants as shown by Registration Returns. Deaths from Consumption, by Registration Returns. Deaths from Consumption, by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns of Deaths. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths of Foreign-born Inhabitants as shown by Registration Returns. Deaths of Foreign-born Inhabitants as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns of Deaths. Average for 10 years, 1878-1887 52.33 54.82 49.96 52.59 54.28 50.80	turns		85.40	37.06	34.00	8.0
10 12 13 13 13 13 13 13 13	in Registration Returns of Deaths	Dec. 31, 1887	51.88	58.70	49.48	4.2
52.52 55.22 50.82	istration Returns.		58.72	55.17	52.03	8.1
Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths from Consumption, by Registration Returns of Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths of Foreign-born Inhabitants as shown by Registration Returns. Deaths of Foreign-born Inhabitants as shown by Registration Returns. Deaths of Foreign-born Inhabitants as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns. Average for 10 years, 1878-1887 52.33 54.32 49.96	over as shown by Registration Returns		52.52	55.22	50.82	4.4
Deaths as shown by Registration Returns. Deaths for Native-born Inhabitants as shown by Registration Returns. Deaths from Consumption, by Registration Returns. Deaths from Consumption, by Registration Returns of Deaths. Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths of Society States St	Deaths of Foreign-born Inhabitants aged 20 years and) (54.27	54.21	54.38	1
Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths from Consumption, by Registration Returns of Deaths. Death from Consumption, by Registration Returns of Deaths. Dec. 31, 1838 Solve of So			28.52	28.80	28.12	.6
Deaths of Foreign-born Inhabitants as shown by Registration Returns. 10 Dec. 31, 1888. 50.49 50.80 50.11 11 Decaths from Consumption, by Registration Returns of Deaths. 52.15 58.80 50.01 12 Dec. 31, 1888. 52.15 58.80 50.01 13 Dec. 31, 1888. 52.15 58.80 50.01 14 Dec. 31, 1888. 52.15 58.80 50.01 15 Dec. 31, 1888. 52.15 58.80 50.01 16 Dec. 31, 1888. 52.15 58.80 50.01 17 Dec. 31, 1888. 52.15 58.80 50.01 18 Dec. 31, 1888. 52.15 58.80 50.0	Deaths of Native-born Inhabitants as shown by Reg-		21.83	21.70	22.11	4
Deaths from Consumption, by Registration Returns. Dec. 31, 1888			50.49	50.80	50.11	.6
All aged 20 and over whose occupations were stated in Registration Returns of Deaths Death of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Foreign-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths of Foreign-born Inhabitants as shown by Registration Returns. Deaths fore Consumption, by Registration Returns. Deaths from Consumption, by Registration Returns as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns. Average for 10 years, 1878-1887 52.15 53.80 50.01 54.29 55.92 55.04 50.95 54.98 55.27 54.58 26.61 27.16 26.08 20.66 20.75 20.80 27.18 26.09 20.80 28.61 27.16 26.09 29.80 20.80 20.81 29.80 20.81 27.16 26.09 20.80 20.81 27.16 26.09 20.80 20.81 27.16 26.09 20.80 20.81 27.16 26.09 20.80 20.81 27.16 26.09 20.80 20.81 27.16 26.09 20.80 20.81 27.16 26.09 20.80 20.81 27.16 26.09 20.80 20.81 27.16 26.09 20.80 20.81 27.16 26.09 20.81 27.16 26.09 20.82 27.16 26.09 20.83 27.16 26.09 20.84 29.75 20.80 20.85 27.16 26.09 20.86 20.75 20.80 20.86	Deaths from Consumption, by Registration Re-		85.55	87.78	33.79	8.9
Average for 10 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths as shown by Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths of Foreign-born Inhabitants as shown by Registration Returns. Deaths from Consumption, by Registration Returns. Average for 10 years, 1878-1887 Average for 10 years, 1878-1887 Later of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Average for 10 years, 1878-1887 Average for 10 years, 1878-1887 Average for 10 years, 1878-1887 Average for 10 years, 1878-1887 Average for 10 years, 1878-1887 Average for 10 years, 1878-1887 Average for 10 years, 1878-1887 Average for 10 years, 1878-1887 Average for 10 years, 1878-1887 Average for 10 years, 1878-1887 Average for 10 years, 1878-1887 Average for 10 years, 1878-1887 Average for 10 years, 1878-1887 Average for 10 years, 1878-1887 Average for 10 years, 1878-1887	Il aged 90 and over whose occupations were stated	Dec. 31, 1888 {				3.7
Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths as shown by Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths of Foreign-born Inhabitants as shown by Registration Returns. Deaths of Foreign-born Inhabitants as shown by Registration Returns. Deaths from Consumption, by Registration Returns. Average for 10 years, 1878-1887 Average for 10 years, 1878-1887 Language 20 and over whose occupations were stated in Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over as shown by Registration Returns. Average for 10 years, 1878-1887 52.92 55.04 50.95 54.58 54.58 55.27 54.58 50.80	all who died aged 20 years and over as shown by Reg-					8.5
54.96 55.27 54.58	Deaths of Native-born Inhabitants aged 20 years and	l i	1	1		4.0
Deaths as shown by Registration Returns. Deaths of Native-born Inhabitants as shown by Registration Returns. Deaths of Foreign-born Inhabitants as shown by Registration Returns. Deaths from Consumption, by Registration Returns. All aged 20 and over whose occupations were stated in Registration Returns of Deaths. All who died aged 20 years and over as shown by Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over the stated in Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over the stated in Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over the stated in Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over the stated in Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over the stated in Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over the stated in Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over the stated in Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over the stated in Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over the stated in Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over the stated in Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over the stated in Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over the stated in Registration Returns. Deaths of Native-born Inhabitants aged 20 years and over the stated in Registration Returns of the stated in Registration Returns of the stated in Registration Returns of the stated in Registration Returns of the stated in Registration Returns of the stated in Registration Returns of the stated in Registration Returns of the stated in Registration Returns of the stated in Registration Returns of the stated in Registration Returns of the stated in Registration Returns of the stated in Registration Returns of the stated in R	Deaths of Foreign-born Inhabitants aged 20 years and		1			.6
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All aged 20 and over whose occupations were stated in Registration Returns of Deaths years and over as shown by Registration Returns. Average for 10 years, 1878-1887 52.33 54.82 49.96	Deaths from Consumption, by Registration Re-	_	1	1		4.8
all who died aged 20 years and over as shown by Registration Returns. 52.59 54.28 50.80	All aged 20 and over whose occupations were stated	Average for 10 years, 1878-1887	i		1	4.8
Deaths of Native-born Inhabitants aged 20 years and	All who died aged 20 years and over as shown by Reg-	11 ' '	1	1	1	8.4
	Deaths of Native-born Inhabitants aged 20 years and		1		1	
Over as shown by Registration Returns. 53.81 53.97 53.04			51.50	1		4.8

LONGEVITY OF DECEDENTS.

In table 99 are presented the statistics concerning the occupations, as far as stated, of persons who died in Michigan during the nineteen years from 1870 to 1888. All who died under twenty years of age have been excluded from the table. No definite conclusion can be drawn from the age attained by any single individual, but when a sufficient number engaged in any one occupation can be taken collectively, they form a good basis for an average estimate of longevity or expectation of life.

The table is divided into twelve general classes, and under each class are included the various trades and professions to which each belongs. The highest average age by class is 59.41 years and the lowest 42.16. This shows a difference of over seventeen years between the average age, at death, of cultivators of the earth and seafaring men.

It is hoped that the facts here given will be put to some good use in throwing some light upon the comparative healthfulness of different pursuits. If the number and average age of the living among these various classes were known, it would add greatly to the value of these statistics.

In the following sub-divisions of the classes, those occupations are selected which have the highest and lowest average age. In these exhibits, care is taken to select such examples only as have cases enough to form some reasonable basis for estimates.

No.	Males.	Av. Age.	No.	Females.	Av. Age.
53	Retired Farmers	69.99	111	Weavers	68.35
93	Retired	72.78	33	Physicians	58.88
18	Weavers	78.11	88	Nurses	58.82
52	Spinners	71.44	28	Boarding House Keepers	56.29
17	Basket-makers	68.97	2,538	Farmers	55.58
365	Clergymen	64.31	145	Tailoresses	52.57
14	Surveyors	64.29	54	Merchants	52.48
90	Capitalists	63.94	12	Basket-makers	50.17

No.	Males.	Av. Age.	No.	Females.	Av. Age.
155	Brakemen	28.40	33	Students	21.65
96	Students	23.86	18	Farmers' Daughters	29.56
14	Rivermen	29.50	28	Prostitutes	26.41
64	Telegraphers	82.59	78	Clerks	80.00
58	Woodsmen	84.75	556	Teachers	80.06
158	Cigar-makers	35.85	843	Dress-makers	33.92
159	Printers	35.85	25	Musicians	84.78
713	Clerks	83.98	19	Hair Dressers	85.18
24	Upholsterers	88.71	17	Artists	87.79
14	Well Diggers	38.98	1,086	Domestics	38.17
1,162	Miners	88.05	166	Milliners	38.28
28	Finishers	84.50	23	Cooks	39.20
124	Farm Laborers	37.18	11	Agents	38.41

TABLE 99.—Exhibiting by classified occupations, the number, aggregate, and average age of decedents in Michigan, aged 20 years and over for the 19 years, 1870-1888; one-half year added to age of each for months and years excluded.

Class.	Occupations,—19 Years, 1870-1888.	Number of	Age in Years and Hundredths of a Year,	
Class.		Persons.	Aggregate.	Average.
	All Aged 20 Years and over	121,148	6,318,418.50	52.15
	All Specified Occupations—Aged 20 Years and Over	113,259	5,906,900.00	52.15
	Occupations Unspecified—Aged 20 Years and Over	7,889	411,518.50	52.16
I.	Cultivators of the Earth	30,850	1,832,874.50	59.41
II.	Active Mechanics Abroad	8,899	181,052.50	53.27
III.	Active Mechanics in Shops	4,839	221,608.00	51.07
IV.	Inactive Mechanics in Shops	2,061	107,987.50	52.39
٧.	Laborers—No Special Trades	10,857	482,094.50	44.40
VI.	Agents, Laborers Abroad, etc.	2,381	108,169.00	43.88
VII.	Seafaring Men.	796	83,559.00	42.16
VIII.	Soldiers.	58	2,961.00	51.05
IX.	Business Men.	4,911	284,985.50	47.84
x.	Professional Men.	2,106	107,448.00	51.02
XI.	Unemployed.	6,048	334,667.00	55.84
XII.	Females	58,342	2,676,087.00	50.17
I.	Cultivators of the Earth	30,850	1,882,874.50	59.41
	Farmers	30,402	1,808,922.50	59.50
	Farm Laborers	124	4,610.00	87.18
	Fruit Growers	12	640.00	53.88
	Gardeners	248	14,440.00	58.28
	Nurserymen	11	552.50	50.28
	Retired Farmers.	53	8,709.50	69.99
11.	Active Mechanics Abroad	3,399	181,052.50	58.27
	Brick-makers.	- 87	2,011.50	54.36
	Carpenters and builders	2,462	180,149.00	52.86
	House-movers	9	510.50	56.72
	Masons	685	84,085.50	53.68
	Millwrights	108	6,510.50	63.21
	Pavers	1	21.50	21.50
	Ship-carpenters	65	3,401.50	52.38
	Stone cutters	87	4,362.50	50.14
III.	Active Mechanics in Shops	4,889	221,603.00	51.07
	Bakers	119	6,166.50	51.82

TABLE 99.—Continued.—Occupations of Decedents, etc.

Class.	Occupations,—19 Years, 1870-1888.	Number of	Age in Yes	
		Persons!	Aggregate.	Average.
ш.	Active Mechanics in Shops.—(Continued.)			
	Blacksmiths	795	44,235.50	55.64
	Boiler-makers	68	1,599.00	42.0
	Book-binders	12	589.00	49.0
	Bottlers	4	114.00	28.50
	Brewers	, 111	5,268.50	56.47
	, Broom-makers	12	583.00	48.58
	Cabinet-makers	181	9,522.50	52.6
	Carriage-makers	151	8,645.50	57.2
	Carriage-trimmers	• 15	668.50	44.57
	Chair-makers.	2	100.00	50.00
	Confectioners	18	846.00	47.00
	Cooks	57	2,710.50	47.5
	Coopers	402	23,080.00	57.4
	Coppersmiths	10	595.00	59.50
	Dyers	17	838.50	49.8
	Finishers	23	793.50	84.50
	Foundrymen	14	709.00	50.64
	Gilders	8	260.00	82.50
	Glass-blowers	4	169.00	42.2
	Gunsmiths	58	8,095.50	58.4
	Machinists	285	14,135.50	49.6
	Marble-workers	88	1,497.50	45.8
	Mechanics	481	23,712.50	49.9
	Millers	297	16,469.50	55.4
	Model-makers	21	1,104.50	52.6
	Molders	189	7,474.50	89.5
	Painters	506	22,012.00	43.5
-	Plasterers	21	1,185.50	58.9
	Plumbers	33	1,329.50	40.2
	Potters	6	418.00	69.6
	Rope-makers	5	291.50	58.3
	Sail-makers	4	195.00	48.7
	Saw-makers	5	235.50	47.1
	Sawyers	15	588.50	85.9
	Smelters	2	101.00	50.5
	Spinners	52	3,715.00	71.4
	Stove-mounters	20	748.00	87.4
	Tanners	87	1,995.50	58.9

TABLE 99.—Continued.—Occupations of Decedents, etc.

Class.	Occupations,—19 Years, 1870-1888.	Number of	Age in Years and Hundredths of a Year.		
CIGOSI		Persons.	Aggregate.	Average.	
III.	Active Mechanics in Shops.—(Continued.)				
	Tinners	96	4,130.00	43.02	
	Turners.	81	1,490.50	48.08	
	Unclassified	29	1,241.50	42.81	
	Upholsterers	24	929.00	88.71	
	Wagon-makers	78	4,325.50	59.25	
	Weavers	18	1,316.00	73.11	
	Wood-carvers	10	478.00	47.30	
IV.	Inactive Mechanics in Shops	2,061	107,987.50	52.39	
	Barbers.	180	7,059.00	39.22	
	Basket-makers	17	1,172.50	68.97	
	Cigar-makers	158	5,408.50	35.35	
	Furriers	2	114.00	57.00	
	Harness-makers	170	8,140.00	47.88	
	Hatters	20	1,099.00	54.95	
	Jewelers	111	5,419.50	48.82	
	Lithographers	6	160.00	26.67	
	Printers	159	5,699.50	35.85	
	Shoe-makers	788	47,682.00	60.51	
	Silversmiths	7	396.50	56.64	
	Tailors	448	25,617.00	57.18	
₹.	Laborers,—No Special Trades	10,857	482,094.50	44.40	
	Choppers	8	285.00	35.63	
	Ditchers	10	621.00	62.10	
	Janitors	87	2,166.50	58.55	
	Laborers	9,151	415,003.50	45.35	
	Loggers	29	961.50	83.16	
	Mill-hands	179	7,213.50	40.30	
	Miners	1,162	44,214.00	38.05	
	Miscellaneous	138	6,128.50	46.04	
	Porters	20	831.00	41.55	
	Rivermen	14	413.00	29.50	
	Salt Packers	4	222.00	55.50	
	Servants	38	1,482.00	39.00	
	Well-diggers	14	545.00	38.93	
	Woodsmen	58	2,013.00	34.71	

TABLE 99.—Continued.—Occupations of Decedents, etc.

Class.	Occupations,—19 Years, 1870-1888.	Number of	Age in Years and Hundredths of a Year.	
		Persons.	Aggregate,	Average.
VI.	Agents, Laborers Abroad, etc	2,381	103,169.00	43.8
	Agents	163	7,506.50	46.0
	Baggagemen	26	1,057.00	40.6
	Brakemen	155	4,401.50	28.4
	Butchers	281	18,155.50	46.8
	Collectors	9	412.50	45.8
	Commercial Travelers.	59	2,444.50	41.4
	Conductors	69	2,648.50	38.1
	Constables	14	667.00	47.6
	Draymen	91	4,827.50	58.0
	Drovers	49	2,412.50	49.
	Engineers	77	8,445.50	44.7
	Expressmen	7	848.50	49.
	Firemen	17	643.50	87.
	Hackmen	49	2,197.50	44.
	Hostlers	15	668.50	44.
	Hunters and Trappers	42	2,240.00	58.
	Indian Chief	1	104.50	104.
	Inspectors of Oil, Gas, Salt, etc.	8	845,00	43.
	Jockeys	5	191.50	38.
	Mail Carriers	4	219.00	54.
	Milk Peddlers	20	1,090.00	54.
	Overseers and Superintendents	58	2,557.50	48.
	Peddlers.	169	8,650.50	51.
	Policemen	32	1,296.00	40.
	Railroad Engineers	825	18,284.50	40.
	Railroad Expressmen	12	544.00	45.
	Railroad Firemen	56	1,204.00	21.
	Railroad Laborers	158	6,029.00	38.
•	Railroad Men	97	3,968.50	40.
	Sextons	7	387.50	55.
		8	286.00	35.
	Station Agents Switchmen	26	866.00	33.
	Teamsters	281	10,686.50	46.
		5	302.50	60.
	Toll-gate keepers	5	159.50	31.
	Waiters	I	1,850.50	50.
	Watchmen	27	575.50	63.

TABLE 99.—Continued.—Occupations of Decedents, etc.

Class.	• Occupations,—19 Years, 1870-1888.	Number of	Age in Years and Hundredths of a Year.		
Oldos.		Persons.	Aggregate.	Average,	
VII,	Seafaring men	796	33,859.00	42.16	
	Fishermen	142	6,597.00	46.46	
	Officers	55	2,727.50	49.59	
	Sailors	594	23,944.00	40.81	
	United States Navy	5	290,50	58.10	
VIII.	Soldiers	58	2,961.00	51.05	
	Officers	7	376.50	58.79	
	Soldiers	51	2,584.50	50.68	
IX.	Business men	4,911	234,935.50	47.84	
	Auctioneers	5	265.50	53,10	
	Bankers	105	6,198.50	59.03	
•	Book-keepers	269	11,121.50	41.34	
	Capitalists	90	5,755.00	63.94	
	Clerks	718	24,189.50	33.98	
	Commission Merchants	25	1,440.50	57.62	
	Contractors and Jobbers	79	4,618.50	58.46	
	Furniture Dealers	11	534.50	48.59	
	Grain Buyers	19	968.50	50.97	
	Grocers	226	10,963.50	48.51	
	Hotel Clerks	7	258.50	36.98	
	Hotel Keepers.	817	16,656.50	52.54	
	Insurance Agents	74	3,867.60	52.26	
	Justices of the Peace	45	2,484.50	54.10	
	Liquor Dealers	22	1,024.00	46.55	
	Liverymen	74	3,328.00	45.11	
	Lumbermen	498	22,948.50	46.5	
	Manufacturers	192	10,063.00	52.41	
	Merchants	1,282	66,702.00	52.0	
	Mill Owners.	9	505.50	56.17	
	News Agents	11	438.50	39.86	
	Public Officers	149	7,747.50	52.00	
	Real Estate Dealers	. 86	5,269.00	61.2	
	Restaurant Keepers	. 25	1,202.50	48.10	
	Salesmen	. 80	3,516.00	43.9	
	Saloon Keepers	442	19,374.00	l .	
	Undertakers	. 22	1	1	
	All Others	39	2,857.50	1	

VITAL STATISTICS OF MICHIGAN, 1888.

TABLE 99.—Continued.—Occupations of Decedents, etc.

Class.	. Occupations,—19 Years, 1870-1888.	Number of	Age in Years and Hundredths of a Year.		
		Persons.	Aggregate,	Average.	
x.	Professional Men	2,106	107,448.00	51.0	
	Actors	11	479.50	43.5	
	Architects	18	608.50	46.4	
	Artists	36	1,530.00	42.5	
	Attorneys at Law	298	15,672.00	52.	
	Civil Engineers	40	2,320.00	58.0	
	Clergymen	365	28,478.50	64.9	
	Dentists	56	2,521.00	45.0	
	Draughtsmen	2	180.00	90.0	
	Druggists	144	6,385.00	44.	
	Editors	45	2,035.50	45,	
	Electricians	2	66.00	83.0	
	Judges	4	222.00	55.	
	Lecturers	2	100.00	50.0	
	Musicians	52	2,280.00	43.	
	Opticians	8	182.50	44.	
	Photographers	22	812.00	36.	
	Physicians and Surgeons	564	81,578.00	55.9	
	Stenographers.	1	22.50	22.	
	Students	96	2,291.00	28.	
	Surveyors	14	900.00	64.	
	Teachers	241	10,019.50	41.	
	Telegraphers	64	2,086.00	82.	
,	Veterinary Surgeons	81	1,743.50	56.	
XI.	Unemployed	6,048	334,667.00	55.	
	Paupers	244	14,514.00	59.	
	Pensioners	8	569.00	71.	
	Retired	93	6,786.50	72.	
	Unemployed	1,960	117,155.00	59.	
	Unknown	3,724	194,904.00	52.	
	All others	19	788.50	88.	
XII.	Females	58,842	2,676,087.00	50.	
	Actresses	4	127.00	81.	
	Agents	11	422.50	88.	
	Artists	17	642.50	87.	
	At Home	868	11,040.50	30.	
	Basket-makers	12	602.00	50.	

TABLE 99.—Continued.—Occupations of Decedents, etc.

Class.	Occupations,—19 Years, 1870-1888.	Number	Age in Years and Hundredths of a Year,		
		Persons.	Aggregate.	Average.	
XII.	Females.—(Continued.)				
	Boarding-house Keepers	28	1,576.00	56.29	
	Book-keepers	7	251.50	85.98	
	Cigar-makers	6	166.00	27.67	
	Clerks	78	2,190.50	80.00	
	Confectioners	6	259.00	48.17	
	Cooks	28	901.50	89.20	
	Domestics	1,086	89,548.00	88.17	
	Dress-makers	348	11,633.50	83.92	
	Druggists	8	154.50	51.50	
	Factory Employés	7	193.50	27.64	
	Farmers	2,538	140,933.00	55.58	
	Farmers' Daughters	18	532,00	29.56	
	Farmers' wives	581	28,979.50	54.58	
	Hair-dressers.	19	667.50	85.18	
	Hotel-keepers	52	2,378.00	45.78	
	Housekeepers	12,100	657,274.50	54.82	
•	Housewives	23,583	1,121,651.50	47.56	
	Houseworkers	1,189	55,226.50	46.45	
	Laborers	289	11,712.50	49.01	
•	Laundresses	10	418.00	41.80	
	Manufacturers	9	470,50	52.28	
	Matrons	91	4,795.50	52.70	
	Merchants	54	2,884.00	52.48	
	Millers.	8	424.00	58.00	
	Milliners	166	6,354.00	88.28	
	Ministers	5	290.50	58.10	
	Miscellaneous	152	7,071.00	46,52	
	Musicians	25	869.50	84.78	
	Nurses	88	5,182.00	58.82	
	Paupers	101	5,836.50	57.79	
	Physicians.	33	1,928.50	58.38	
	Prostitutes	28	-		
	Saloon-keepers	10	607.50 461.00	26.41 46.10	
	Seamstresses	251	10,098.50	40.23	
		251		ļ	
	Spinsters		628.50	57.14 95.00	
	Stenographers.	2	50.00	25,00	
	Students	88	714,50	21.65	

VITAL STATISTICS OF MICHIGAN, 1888.

TABLE 99.—Continued.—Occupations of Decedents, etc.

Class.	Occupations,—19 Years, 1870-1888.	Number of	Age in Years and Hundredths of a Year.		
			Aggregate.	Average.	
XII.	Females.—(Continued.)				
	Tailoresses.	145	7,622.50	52,57	
	Teachers	556	16,712.00	30.08	
	Telegraphers.	7	171.50	24.50	
	Unemployed	4,994	285,330.50	57.13	
	Unknown	4,165	216,614.50	52.01	
	Washer-women	66	3,046.00	46.15	
	Weavers	111	7,587.50	68.35	
	Widows	18	957.50	78.65	

LAWS OF MICHIGAN,

CONCERNING THE

REQUIRING OF A CIVIL LICENSE TO MARRY,

THE SOLEMNIZATION OF MARRIAGES, AND THE RECORD, RETURN, AND COMPILATION OF BIRTHS, MARRIAGES, AND DEATHS; WITH SUGGESTIONS TO PERSONS AUTHORIZED TO SOLEMNIZE MARRIAGES.

CHAPTER 236, HOWELL'S ANNOTATED STATUTES, 1882.

MARRIAGE AND THE SOLEMNIZATION THEREOF.

SECTION.

SECTION.

6209. Who shall be capable of contracting Marriage. 6215. Marriage, by whom solemnized.

6210. Marriage is a civil contract.

6211. Who shall not intermarry.

6212. 6213. 6214. Who not to marry.

6217. No particular form required.

6220. Marriages not void in certain cases.

cool as

6221. Marriages among Quakers, etc.

Chapter eighty-three of Revised Statutes of 1846, with amendments.

(6209.) Section 1. Every male who shall have attained the full age of eighteen years, and every female who shall have attained the full age of sixteen years, shall be capable in law of contracting marriage, if otherwise competent.

(6210.) Sec. 2. Marriage, as far as its validity in law is concerned, is a civil contract to which the consent of parties capable in law of contracting

is essential.

(6211.) Sec. 3. No man shall marry his mother, grandmother, daughter, granddaughter, stepmother, grandfather's wife, son's wife, grandson's wife,

For prior Statutes relative to the solemnization of marriages, see Woodward Code, p. 42; Cass Code, p. 111; Code of 1820, p. 259; Rev. of 1827, p. 280; Laws of 1832, p. 6; Rev. of 1838, p. 829; R. S. of 1838, p. 833.

wife's mother, wife's grandmother, wife's daughter, wife's grandaughter, nor his sister, brother's daughter, sister's daughter, father's sister, or mother's sister.

(6212.) Sec. 4. No woman shall marry her father, grandfather, son, grandson, stepfather, grandmother's husband, daughter's husband, granddaughter's husband, husband's father, husband's grandfather, husband's son, husband's grandson, nor her brother, brother's son, sister's son, father's brother, or mother's brother.

(6213.) Sec. 5. No marriage shall be contracted whilst either of the parties has a former wife or husband living, unless the marriage with such

former wife or husband shall have been dissolved.

(6214.) Sec. 6. No insane person or idiot shall be capable of contracting marriage. All marriages heretofore contracted between white persons and those wholly or in part of African descent are hereby declared valid and effectual in law for all purposes, and the issue of such marriages shall be deemed and taken legitimate as to such issue and as to both of the parents.

(6215.) Sec. 7. Marriages may be solemnized by any justice of the peace in the county in which he was chosen, and they may be solemnized throughout the State by any minister of the gospel who has been ordained according to the usages of his denomination, and who is a pastor of any church or churches in this State, or who shall continue to preach the gospel in this State: (Provided.)*

(6216.) Sec. 8.*

(6217.) Sec. 9. In the solemnization of marriage, no particular form shall be required, except that the parties shall solemnly declare, in the presence of the magistrate or minister and the attending witnesses, that they take each other as husband and wife; and in every case there shall be at least two witnesses, besides the minister or magistrate, present at the ceremony.

Sec. 10.† Sec. 11.† Sec. 12.† Sec. 13.† Sec. 14.*

6220.) Sec. 16. No marriage solemnized before any person professing to be a justice of the peace or a minister of the gospel, shall be deemed or adjudged to be void, nor shall the validity thereof be in any way affected on account of any want of jurisdiction or authority in such supposed justice or minister: Provided, The marriage be consummated with a full belief on the part of the persons so married, or either of them, that they have been lawfully joined in marriage.

(6221.) Sec. 17. The preceding provisions of this chapter, so far as they relate to the manner of solemnizing marriages, shall not affect marriages among the people called Friends or Quakers; nor marriages among people of any other particular denomination having, as such, any peculiar mode of solemnizing marriages; but such marriages may be solemnized in the manner heretofore used and practiced in their respective societies or denominations.

b Act 187, Laws of 1887, prohibits divorced persons from re-marrying for a period specified in the decree, not to exceed two years.

*Repealed by Act 128, Laws of 1887.
†Repealed by Act 194, Laws of 1887, p. 266, Sec. 10.

ACT NO. 128, LAWS OF 1887.

FOR THE REQUIRING OF A CIVIL LICENSE IN ORDER TO MARRY, AND THE DUE REGISTRATION OF THE SAME, AND TO PROVIDE A PENALTY FOR THE VIOLATION OF THE PROVISIONS OF THE SAME.

SECTION 1. The People of the State of Michigan enact, It Persons intendshall be necessary for all parties, intending to be married, to must obtain obtain a marriage license from the county clerk of the county license from county clerk, in which either the man or woman resides, and to deliver the said license to the clergyman or magistrate who is to officiate,

before the marriage can be performed.*

Blank forms for marriage license and certificate, as Secretary of also proper books of registration ruled for the items contained forms, blanks, in said forms shall be prepared by the Secretary of State, and etc. shall be furnished by him to the county clerk of the various counties of the State in quantities needed. The blank forms for license and certificate shall be made in duplicate and shall provide spaces for the entry of the following items, to wit: The Form of Hoense. full name, age, color, place of residence, place of birth, occupation, and if known, the father's name, and mother's maiden name, of each of the parties to be married; the number of times either of the parties may have been previously married; the bride's maiden name, in case she is a widow; the date of the giving of the license; the signature of the county clerk; the date and place of the marriage; the names and residences of two witnesses to the marriage, and the certification of the officiating clergyman or magistrate, that the marriage contemplated by the license has been performed by him. And the Secretary of the State secretary of shall furnish to the county clerks of the various counties of the to county clerks State, blank forms of affidavit, containing the requisite allega-blank forms of tions, under the laws of this State, of the competency of the parties to unite in the bonds of matrimony, and any party applying for license to marry, shall cause such an affidavit to be made and filed with the county clerk, as a basis for the issuing of the license; and such affidavit, together with the license, shall be made a matter of record of said clerk's office.

SEC. 3. It shall be the duty of the county clerk, on applica- Duty of county tion being made to him, to fill out the blank spaces of the license clerk according to the sworn answer of the applicant taken before him

^{*}This act went into effect Sept. 27, 1887.

Amended by Act No. 256, Laws of 1889, which see on following page for amended pro-

Fees

or some person duly authorized by law to administer oaths. it shall appear that the parties are legally entitled to be married. the county clerk shall sign the license in certification of the fact that it is properly issued, and he shall make a correct copy thereof in the books of registration. For his services connected therewith he shall be entitled to a fee of fifty cents, to be paid by the party applying and at the time of the issuing of the license. He shall give the license, thus filled out and signed by him, together with the blank form of certificate, to the party applying for delivery to the clergyman or magistrate who is to officiate at the marriage. On the return of the license to the county clerk (as specified in section four, below), with the certificate of the clergyman, or magistrate, that the marriage has been performed, he shall record in the book of registration, in their proper places of entry, the date and place of the marriage, the names and residences of two witnesses to the marriage, and the name of the officiating clergyman or magistrate. All licenses and certificates so issued and returned shall be preserved on file in the office of the county clerk, and he shall, as often as once in three months, make a faithful report to the Secretary of State of all licenses and certificates issued and received by him.

Licenses and certificates, where filed, etc.

Duty of officiating clergyman or magistrate.

SEC. 4. It shall be the duty of the clergyman or magistrate, officiating at a marriage, to fill out the spaces of the certificate left blank for the entry of the time and place of the marriage, the names and residences of two witnesses, and his own signature in certification that the marriage has been performed by him. He shall separate the duplicate license and certificate and retain one-half for his own record, and he shall return the other half within ten days to the county clerk issuing the same.

Penalty for violating act by county clerk. SEC. 5. Any county clerk who shall refuse to give a license to persons properly applying and legally entitled to be married, or who shall violate any of the provisions of this act, shall be adjudged guilty of a misdemeanor, and shall be punished by a fine of not less than twenty-five dollars or more than one hundred dollars, or in default of payment thereof by imprisonment in the county jail for a term of thirty days.

Penalty for violation, by clergyman, etc. SEC. 6. Any clergyman or magistrate who shall join together in marriage parties who have not delivered to him a properly issued license, as provided for in this act, or who shall violate any of the provisions of this act, shall be adjudged guilty of a misdemeanor, and shall be punished by a fine of one hundred dollars, or, in default of payment thereof, by imprisonment in the county jail for a term of ninety days.

Penalty for neglect to return certificate.

SEC. 7. Any person whose duty it shall be to return a marriage certificate to the county clerk, who shall neglect to return said certificate, shall be adjudged guilty of a misdemeanor, and shall be punished by a fine of not exceeding one hundred dollars or ninety days' imprisonment, or both in the discretion of the court.

False swearing in application, perjury. SEC. 8. Any person applying for a marriage license who shall swear to a false statement therein, shall be guilty of perjury and shall be prosecuted therefor under the general laws of the State.

SEC. 9. All reports of marriage, sent by the county clerks of Filing and rethe various counties of the State to the office of the Secretary of reports. State, shall be preserved on file in that office, and a proper record thereof shall be made and kept.

SEC. 10. The record of any license to marry, or of any mar-records of riage certificate in any county clerk's office, or a certified copy license, etc., prima facie thereof, shall be prima facie evidence in any court or proceed-evidence. ings in this State, with the same force and effect as if the original were produced, both as to the facts therein contained and as to the genuineness of the signatures thereto.

SEC. 11. All other acts and parts of acts which are inconsist- Acts repealed. entherewith are hereby repealed.

ACT NO. 256 LAWS OF 1889.

AN ACT to amend section one of act number one hundred and twenty-eight, of the laws of eighteen hundred and eighty-seven, being an act entitled "An act for the requiring of a civil license in order to marry, and the due registration of the same, and to provide a penalty for the violation of the provisions of the same," and to extend the provisions of said act to non-residents of this State.

Section amended.

SECTION 1. The People of the State of Michigan enact, That section one of act number one hundred and twenty-eight of the session laws of eighteen hundred and eighty-seven, being an act entitled "An act for the requiring of a civil license in order to marry, and the due registration of the same, and to provide a penalty for the violation of the provisions of the same," approved May, thirty-first, eighteen hundred and eighty-seven, be and the same is hereby amended so as to read as follows:

Persons intending marriage must obtain license.

Where nonresidents must obtain license. Section 1. The People of the State of Michigan enact, It shall be necessary for all parties intending to be married to obtain a marriage license from the county clerk of the county in which either the man or woman resides, and to deliver the said license to the clergyman or magistrate who is to officiate, before the marriage can be performed. If both parties to be married are non-residents of the State it shall be necessary to obtain such license from the county clerk of the county in which the marriage is to be performed.

This act is ordered to take immediate effect. Approved July 3, 1889.

An Act to provide for the Registration of Births. MARRIAGES AND DEATHS, BEING ACT No. 194 of 1867, AS AMENDED BY ACT No. 125 of 1869.

(858.) SECTION 1. The People of the State of Michigan enact, Dutles of super-That it shall be the duty of the supervisor of each township, sors, and the supervisor or assessor of any city or ward therein, in this State, between the tenth day of April and the first day of to be made June, in the year eighteen hundred and sixty-nine, to ascer- from April 5 to 100 and 100 and 100 a tain, by actual inquiry or otherwise, of the inhabitants thereof, Dec. 31, 1868. the births and deaths which have occurred in their respective townships, cities, or wards, from and including April fifth, eighteen hundred and sixty-eight, to and including December thirty-first, eighteen hundred and sixty-eight, together with the facts relative thereto, as are hereinafter provided for, and shall make an accurate return thereof to the clerk of the Return to county county in which such township or city is situated, on or before clerk. the first said day of June; and for such service shall receive ten cents for each birth and death so returned by them, to be paid by the county in which such returns are made. In the year in 1870 and eighteen hundred and seventy, and in each and every year thereafter. thereafter, it shall be the duty of the officers above mentioned, Returns to in-between the tenth day of April and the first day of June, to clude from Jan-ascertain, by actual inquiry or otherwise, of the inhabitants ber last preced-thereof, the births and deaths which have occurred in their respective townships, cities, or wards, during the year ending statistics, how on the last day of the preceding December, and shall make the obtained. return, and receive therefor the compensation above provided compensation. for: Provided, That in the city of Detroit, the duties required Proviso relative by this act to be performed by supervisors and assessors shall to the city of be performed by persons appointed by the common council, for that purpose; and it shall be the duty of the common council puty of common on or before the tenth day of April, in each year, to appoint council such number of persons in each ward of said city as shall be necessary to perform said duties within the time limited by this act; and such persons shall possess all the authority con-regions to be ferred upon, and perform all the duties required of supervisors appointed by. and assessors, by this act, within the territory assigned them, respectively by the common council, and shall receive such compensation for their services, not exceeding the sum allowed compensation by this act to supervisors and assessors, as shall be fixed by appointed.

How paid. Penalties. the common council, to be paid by the county of Wayne, and shall be liable to the same penalties for refusal or neglect to perform any of said duties.

Marriages to be

Marriage of Ouakers. (859.) SEC. 2. Every justice of the peace, minister of the gospel, and all other persons authorized by law to solemnize marriages in this State, shall make a record of each marriage so solemized by him, and every clerk or keeper of the records of the meetings in which any marriage among the Friends or Quakers shall be solemnized, shall make a record of such marriage, together with all the facts relating to the same, as required by the third section of this act; and such justice, minister of the gospel, clerk, or other person, shall, at the time such marriage is solemnized, deliver, on demand, to either of the parties so joined in marriage, as aforesaid, a certificate of such marriage, containing all the facts in relation thereto, required by said third section of this act, and shall, within ninety days thereafter,

deliver to the clerk of the county in which such marriage took place, a certified copy of such record, and, at the same time, pay

Certificates to

Fee for record-

County clerks;

Births, marriages and deaths to be numbered and indexed, Record of births shall state.

Proviso.

Record of marriages shall state.

to the clerk twenty-five cents for recording the same. (860.) Sec. 3. It shall be the duty of the county clerks of the several counties in this State, on receiving the returns of such births, marriages, and deaths, to record the same at length in separate books, to be provided at the expense of the State by the Secretary of State, for that purpose, with proper indexes thereto. The births, marriages, and deaths shall be numbered and recorded in the order in which they are received by the clerk, and the record of marriages shall be indexed, using both the name of the bridegroom and bride. The record of births shall state, in separate colums, the date of the birth, the name of the child (if it have any), the sex and color of the child, the place of birth, the christain and surname of both parents, the residence and nativity of the parents, the occupation of the father, and the date when the record was made: Provided, That in case the child has no christian name, such name shall be obtained and reported to the county clerk in the next annual report of the supervisor or assessor, and such christian name shall be distinctly designated in such report as the christian name belonging to a child previously reported, and shall be properly entered by said county clerk, in the blank left for such christian name in his book of record; and it shall be the duty of the several county clerks, on or before the tenth day of April in each year, to give to the officers required to make the said returns, lists of such children whose christian names have not been previously reported in their respective towns, cities or wards. The record of marriages shall state, in separate colums, the date and place of marriage, the christian and surname of the bridegroom and bride, and the maiden name of the bride, if a widow, the color, age, and place of birth of each, the residence of each at the time of marriage, the occupation of the bridegroom, and the name and official station of the person by or before whom they were married, the names and residences of at least two witnesses present at such

The provisions of this section are undoubtedly repealed by Act 128, Laws of 1887, except so far as relates to the delivering of a certificate to either of the parties joined in a marriage.

marriage, and the date when such record was made.* The Record of deaths record of deaths shall state, in separate columns, the date of shall state. the death, the christian and surname of the deceased, the sex and color, whether married or single, the age in years, months, and days, the place of death, the disease or apparent cause of death, the nativity of the deceased, and the occupation, if any, and the names, residence of the partents, if known, and the date when such record was made. The clerks of the several Beturn of counties shall annually, on or before the first day of September county clerk. make and transmit to the Secretary of State, a certified copy of the records of his office, of all the births, marriages,* and deaths reported in their respective counties for the year ending December thirty-first, last preceding. And each county clerk shall receive for the record of each birth and death in his office three compensation. cents, and three cents for each birth, marriage, and death, returned by him to the Secretary of State, to be paid by the county, and shall be compensation in full for all services required by this act to be performed by him.

861.) SEC. 4. The Secretary of State shall prepare and fur-secretary of nish to the county clerks of the several counties in this State, nish all blank blank books of suitable quality and size, with proper rulings and books, blanks, instructions headings, to be used as books of record, in carrying into effect etc. the provisions of this act. He shall also prepare and furnish blank "forms of returns," as hereinbefore specified accompanied with such instructions and explanations as may be necessary to insure uniformity in such returns, which blanks shall be forwarded to the several county clerks on or before the first day of March in each year; and the said county clerks shall deliver the same to the supervisors or assessors of the several townships, cities or wards therein, in their respective counties, on or before

the tenth day of April.

(862.) SEC. 5. It shall be the duty of the Secretary of State Returns to be to receive the returns made in pursuance of the third sec-bound and indexed, tion of this act, and he shall cause the same for each year to be bound together, in one or more volumes, at the expense of the State, and make indexes thereto; and with such assistance as may be voluntarily rendered by any authorized committee appointed by the medical faculty of the university of Michigan or by any regularly authorized medical society in this State, for that purpose, he shall prepare such tabular statements, results, and deductions therefrom as will render them of practical utility, and make report thereof, annually, to the Governor of the Secretary of State, which report may be ordered published and distributed annual report. in such manner as the Legislature may from time to time direct.

(863.) Sec. 6. Every justice of the peace, minister of the Neglect to keep gospel, and all other persons authorized by the laws of this records. State to solemnize marriages, and clerks or keepers of records of the meetings in which any marriage among the Friends or Quakers shall be solemnized, who shall neglect or refuse to Neglect to demake a record of such marriage, or to deliver to the county cates. clerk of the county in which the marriage took place, a

^{*}Amended by Act 128, Laws of 1887, which see on previous pages for amended

certified copy of such record, or who shall refuse, on demand, to deliver to the parties to such marriage the certificate thereof, as required by section two of this act, or who shall willfully make a false or fictitious entry in his record of marriages or in the certified copy of such record delivered to the county clerk, or in the certificates of marriages delivered to the parties thereto, shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be punished by fine not exceeding one hundred dollars, and in default of paying the same, shall be imprisoned in the county jail of the county in which such conviction shall be had, until said fine be paid, but not to exceed the period of ninety days.*

Certificate of death,

Penalty.

(864.) Sec. 7. Every physician, surgeon, or midwife, who shall have been in attendance upon any deceased person, shall, upon application of any supervisor or assessor of the township, city, or any ward thereof, in which such death occurred, make out and deliver to such supervisor or assessor a certified statement, without fee, containing the name of the disease, or cause (if known), producing the death of such person; and any medical attendant who shall neglect or refuse to give such statement, or who shall willfully make a false statement in relation to such death, shall, for such offense be liable to pay a fine of not less than ten nor more than fifty dollars, and the costs of prosecution, which fine the said supervisor or assessor is hereby required to sue for and collect, in his official character.

Penalty.

Refusal to make cortificate

Facts to be ob-

Refusal to fur-

Obtained under

Neglecting to answer a sub-

(865.) Sec. 8. It shall be the duty of each supervisor or assessor to obtain the facts in relation to births and deaths within his township, city, or any ward therein (not otherwise obtained), from the heads of families, the keepers, overseers. or superintendents of asylums, hospitals, jails, prisons, workhouses, almshouses, houses of correction, and similar institutions, the keepers of hotels, public and private boardinghouses, and the masters or chief officers of steamboats and sail vessels, navigating any of the waters of this State, and touching at any port of entry therein, in which such births or deaths occurred; and if either of the above named persons shall refuse to give such information, then the same shall be obtained by such supervisor or assessor from any person having a knowledge of the facts in relation to such birth or death; and if the supervisor or assessor shall have reason to believe that any person or persons willfully misrepresented or concealed any facts relative to such birth or death in his township, city, or any ward therein, which he cannot otherwise obtain, he may examine such person or persons on oath (which oath such supervisor or assessor is hereby empowered and authorized to administer) in relation to any birth or death within his township, city, or any ward therein, of which such person or persons may have any knowledge or information; and if any person, after being duly supcensed (as provided for compelling the attendance of witnesses in justices' courts) by such super-

^{*}The provisions of this section are undoubtedly repealed by Act 128, Laws of 1887, except so far as relates to the penalty for refusing to deliver to the parties to a mar-siage a certificate thereof.

visor or assessor, for the purpose aforesaid, shall neglect or refuse to appear before such officer, or, appearing, shall refuse to be sworn and testify in relation to such matter, he shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished therefore by fine not exceeding fifty dollars, Penalty. and in default of paying the same shall be imprisoned in the county jail of the county in which such conviction shall be had, until said fine be paid, but not exceeding ninety days; and any person who after being duly sworn as aforesaid, shall willfully perjury. make any false statement in relation to any birth or death, about which he is required to testify, shall be deemed guilty of willful and corrupt perjury: Provided, That no person shall be Proviso. required to answer any question which will tend to criminate himself or herself upon any such examination.

(866.) Sec. 9. In case of the refusal or neglect by any of the Neglect to perform duties. officers mentioned in this act, to perform any of the duties hereinbefore required of them or either of them, to be done and performed by any of the provisions herein contained, such officer shall be liable to a fine not to exceed one hundred dollars, and Penalty. the costs of prosecution; and the prosecuting attorney in each county is hereby required to prosecute, in the name of the people of the State of Michigan, all persons in his county who shall willfully violate any of the provisions of this act; and the said Misdemeanor. supervisor or assessor of any township, city, or any ward therein, may be prosecuted for a misdemeanor under the section, and

upon conviction, punished as therein provided for.

SUGGESTIONS TO PERSONS AUTHORIZED TO SOLEMNIZE MARRIAGES IN MICHIGAN.

A thorough knowledge of the law concerning the solemnization and return of marriages in Michigan is necessary to a correct performance of the duties of persons authorized to solemnize marriages.

The most frequent violation of the law is in the marriage of persons under the lawful age, which is: for males eighteen (18) years, and for females sixteen (16) years. See Section (6209), Howell's Annotated Statutes, 1882, printed on a previous page. The penalty for the violation of this provision is a forfeit of not exceeding one hundred (100) dollars. Sec. 6, Act 128, Laws of 1887, printed on a previous page.

In the record and return of marriages, every item specified in the law

should be carefully ascertained, and correctly and plainly written. No item should be omitted, and nothing taken for granted, as is often the case with

the fact as to COLOR of persons married.

In recording the BIRTHPLACE of each, the State or country should be distinctly given in each case. This will avoid the difficulty of ascertaining the nativity of persons whose birthplace is returned "Holland," "Hanover," "Denmark," "Wales," "Paris," etc.,—names of places which may be either in the United States or Europe. If such or similar names occur, please state whether it is Holland, $\hat{M}ichigan$, or Holland, Europe, and so for each case. Never return the birthplace "America," as we cannot know whether it is in the United States, and are therefore compelled to compile it with the "Unknown."

Blanks for the return of marriages to the county clerk will not be required under the new law, as the return of the license with the certificate properly

filled out will constitute the proper return to the county clerk.

The license to marry can only be procured from the several county clerks. but the affidavit necessary to procure the same may be made before any person authorized to administer oaths, and blank affidavits can be had from any county clerk or from the office of the Secretary of State.



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